# THE WTO AND PRECAUTION: SUSTAINABLE DEVELOPMENT IMPLICATIONS OF THE WTO ASBESTOS DISPUTE

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## 1. Introduction

On 18 September 2000, the World Trade Organisation (WTO) released a panel report on the *EC/Asbestos* dispute.[1] The dispute arose in 1996, when the French Government adopted Decree No. 96–1133 banning asbestos and products containing asbestos, to protect the health and safety of its population. In 1998, Canada submitted a complaint to the WTO's dispute resolution panel, claiming the decree was inconsistent with WTO obligations. In particular, Canada challenged the total ban on chrysotile (white) asbestos, which Canada believed could be safely marketed if appropriate 'controlled use' policies were in place.[2] The European Communities (EC), for France, defended the measure, on the grounds that asbestos was a carcinogen estimated to kill more than 2000 people a year in France alone, and that it had the right under WTO law to set its own safety standards.

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[1] *EC/Measures Affecting Asbestos and Asbestos-Containing Products* WT/DS135/R [18.9.00].

[2] Some might suggest that the French Decree itself was not based on the precautionary principle, but rather on prevention of a known health hazard. To a certain extent, the nature of the Decree itself is peripheral to the purpose of this article, which focuses on the use of precaution in the reasoning of the panel and WTO AB, rather than its use by the French in drafting their Decree. However, we note that the Decree banned even the 'controlled use' of asbestos, if substitute products were available. While the Decree is mainly based on solid scientific evidence showing that basically all forms of exposed asbestos are carcinogenic, it also ruled out enclosed asbestos, and certain other uses (even if these uses were conducted according to international safety standards). As Canada argued, many hazardous products are made, used and traded every day, in accordance with international standards drafted with both known and unknown risks in mind. The absolute aspect of the Decree was disputed, as Canada claimed that 'safe use' of asbestos was possible, and that scientific uncertainty surrounded the risks inherent in the use of certain types of asbestos but also their substitutes. Indeed, the French Government, in the Decree itself, made provision for continued 'controlled use' of asbestos where no substitutes were available. As such, it could be argued that the legislation did not need to explicitly mention the precautionary principle. To the degree it sought to minimise a potential health risk, rather than completely banning these substances in all instances, this argument would lead, the Decree was based on precaution. This discussion is beyond the scope of this article.

*Journal of Environmental Law Vol 15 No 3* 

In the Panel decision, it was found that the disciplines of the WTO Agreement on Technical Barriers to Trade (TBT) did not apply to the case. Asbestos products and non-asbestos substitutes (such as PVA, cellulose and glass fibres) were found to be 'like products' under Article III:4 of the GATT 1994. Consequently, the French decree, particularly the ban, was found to discriminate between the asbestos and its substitute products. However, for the first time in GATT WTO history, it was then found that the violation fell under the Article XX(b) exemption, which permits measures that are necessary to protect human life or health. Since it was also found that there was no non-violation nullification of the benefits of GATT 1994 provisions, the French ban on asbestos was saved.

Canada appealed certain aspects of the decision, seeking to overturn the Panel's approval of the ban, and contesting the Panel's finding that the French decree was not a regulation subject to the WTO TBT Agreement which requires, *inter alia*, that prohibitions be based on the descriptive characteristics of products, rather than their performance. The European Communities cross-appealed, requesting that the ban be upheld and that the Article III:4 'like-product' determination be reversed.

The WTO Appellate Body reversed much of the Panel's reasoning. In particular it reversed the Panel's finding that the TBT Agreement did not apply to part of the Decree, and found that the measure, viewed as an integrated whole, constitutes a technical regulation under the TBT Agreement. It declined to further analyse the application of the TBT Agreement to the facts in question, noting that its authority under Article 17(6) DSU is limited to issues of law covered in panel reports and legal interpretations developed by the Panel.[3]

The Appellate Body also reversed the Panel's findings that it is not appropriate to take into consideration the health risks associated with chrysotile asbestos fibres and with cement-based products containing chrysotile asbestos fibres, in examining 'likeness' under Article III:4 of the GATT 1994, and found that Canada had not satisfied its burden of proving that these fibres, nor the cement-based products containing these fibres, were 'like products' under Article III:4 of the GATT 1994. In consequence, it reversed the Panel's finding that the measure was inconsistent with Article III:4 of the GATT 1994. Finally, it upheld the Panel's finding that the measure at issue was 'necessary to protect human . . . life or health' within the meaning of Article XX(b) of the GATT 1994, and as the Panel had acted consistently with Article 11 of the DSU, found that Canada had not succeeded in establishing that the measure at issue was inconsistent with the obligations of the European Communities under the covered agreements.[4]

After the report of the Appellate Body, several commentators observed that the case has strengthened perceptions of WTO capacity to accommodate domestic and international sustainable development concerns, particularly with regard to public health.[5] While many agreed with the results of the original panel's findings, concerns were raised within health and environment communities about the panel's 'like products' analysis, which public interest groups believed did not give sufficient weight to

[3] For one rather critical commentary on this aspect of the Appellate Body (AB) *Asbestos* decision, see J. Pauwelyn, 'Cross-Agreement Complaints Before the Appellate Body: A Case Study of the EC/Asbestos dispute', *Journal of World Trade* (2002) 63.

[4] *EC/ Measures Affecting Asbestos and Asbestos-Containing Products* WT/DS135/AB/R [12.3.01] para 192.

[5] *Bridges* (Geneva: ICTSD, 2000) Year 4(7) at 9.

the potentially life-threatening nature of asbestos and asbestos fibres.[6] The Appellate Body's new reasoning and the procedures attempted, in contrast, received cautious approval from these communities.[7] We believe that the report was more balanced in its approach to a situation where economic, environmental and social priorities overlap. In doing so, the Appellate Body's reasoning may have been implicitly based on a more precautionary approach, and this saga offers lessons on the utility of this contested principle as a tool to help balance decision-making with respect to economic measures taken in pursuit of health and other social objectives.

## 2. The Precautionary Principle

It has been argued that the precautionary principle is too new or undefined to properly guide decision-makers or be considered law. However, it is possible to trace both the historical development of this principle, and to define it in the context of science, policy and law. In this section, based on recent surveys of analysis,[8] we will outline the nature of the precautionary principle with regards to its history, place in scientific methodology and policy-making utility. Then, we will make observations as to its present place in WTO/GATT law and, as this does not exist in isolation from other legal systems, in international, particularly European, law and jurisprudence.

The first barrier to an objective discussion is considerable uncertainty as to terminology. Precaution has been debated as a legal concept, an approach or a principle.[9] One way to overcome this slightly tired discussion is to simply call for the implementation of precaution, then focus on the scope, nature and implications of the tool.[10]

The USA and Australia are two major trading nations which have persistently objected to the recognition of the precautionary principle as a binding principle of international customary law.[11] Interestingly the Canadian position is somewhat more diverse. Precaution underpins several national laws, and the Canadian Supreme Court recognised the arguments that the precautionary principle is a principle of customary international law, in a recent decision, *Canada Ltée (Spraytech, Société d'arrosage) v Hudson (Town)*.[12] Here, L'Heureux-Dubé J stated: 'Scholars have docu-

[6] Ibid.

[7] See, e.g. S. Boutillon, 'The Precautionary Principle: Development of an International Standard', *Michigan Journal of International Law* (Winter 2002) 429, 461.

[8] Communication from the European Commission on the Precautionary Principle, EC COM 1 (2000) WTO Doc: WT/CTE/W/147G/TBT/W/137 [27.6.00].

[9] The term 'precautionary approach' can be used to highlight disapproval of the term 'precautionary principle'. The issue is slightly more than semantics. An approach describes more or less a legal technique to deal with uncertainties, scientific or otherwise, while a 'principle' can bind the actor (legislator, administration or judiciary) to apply these techniques. But the mere use of the word approach or principle does not indicate the status of precaution in international law.

[10] See F. Perrez, *Precaution: From Rio to Johannesburg* (Geneva: Geneva Environment Network/Swiss Agency for Cooperation and Development, 2002). See also OECD Ministerial Declaration (May 2001) at para 14.

[11] See debates in the World Summit for Sustainable Development in Johannesburg, South Africa, where the Australian and USA delegations strongly resisted recognition of the developments in international law, since 1992, regarding the precautionary principles. See also the discussions at the 4th Ministerial Conference in Doha, Qatar, where reportedly the USA with several developing countries successfully withstood an EU attempt to initiate negotiations on the precautionary principle in WTO law.

[12] 114957 *Canada Ltée (Spraytech, Société d'arrosage) v Hudson (Town)* [2001] SCJ 42 (Quicklaw).

mented the precautionary principle's inclusion in virtually every recently adopted treaty and policy document related to the protection and preservation of the environment.'[13] As a result, there may be 'currently sufficient state practice to allow a good argument that the precautionary principle is a principle of customary international law'.[14]

The situation in the EU, of which the French Republic is Member, will be discussed below. Despite what appears to be a very similar status of the precautionary principle in internal law, the *Asbestos* dispute arose about different level of precaution.

### 2.1 The Nature of the Precautionary Principle

The precautionary principle is not a panacea, nor is it intended to be used in all situations. It is, however, a useful tool for a more systematic response to the problem of scientific uncertainty in environment and health decision-making. The proponent of activities which might lead to significant, serious, or irreversible harm is obliged to take or permit measures to be taken to prevent this damage (including halting the proposed activities), in spite of lack of full scientific certainty as to the existence of the risk, its nature or the potential damage. As such, essential elements include the degree of potential damage which triggers the principle, an aspect of proportionality between to the harm and the necessary measures, and a reversal of the burden of proof.

While risk assessment and management has taken place on national and international levels for many years, the precautionary principle as such was first articulated as a specific principle of environmental policy in Germany, the *Vorsorgeprinzip.*[15] The concept of '*Vorsorge*' is to be found in the 1974 Federal Emission Protection Act, an air pollution control law that doubles as the framework for general environmental policy,[16] and in 1980 the *Vorsorgeprinzip* emerged among the German environmental policy-makers. It arose in senior level discussions on air pollution,[17] and later that year the West German Council of Experts for the Environment made it one of the cornerstones of a report on the North Sea.[18] By 1983, precaution was firmly estab-

[13] The judgment cites D. Freestone and E. Hey, 'Origins and Development of the Precautionary Principle' in D. Freestone and E. Hey (eds), *The Precautionary Principle and International Law* (1996) at 41.

[14] This judgment also cites J. Cameron and J. Abouchar, 'The Status of the Precautionary Principle in International Law', ibid at 52; and O. McIntyre and T. Mosedale, 'The Precautionary Principle as a Norm of Customary International Law', 9 (1997) JEL 221 at 241 ('the precautionary principle has indeed crystallised into a norm of customary international law'). L'Heureux Dube J pointed out that the Supreme Court of India also considers the precautionary principle to be 'part of the Customary International Law' in *A.P. Pollution Control Board v Nayudu* [1999] 53 SOL 8, and *Vellore Citizens Welfare Forum v India* [1996] Supp 5 SCR 241. She held that in the context of the precautionary principle's tenets, the Town's concerns about pesticides fit well under their rubric of preventive action.

[15] For a detailed review of the origins and history of precaution see, A. Trouwborst, *Evolution and Status of the Precautionary Principle in International Law* (The Hague: Kluwer Law International, 2002) at 7.

[16] Bundesimmissionsschutzgesetz—BImSchG, Article 5(2): 'Installations subject to authorisation are to be constructed and operated in such a manner that . . . 2. Precaution is taken against damaging environmental effects . . .

[17] G. Feldhaus, 'Der Vorsorgegrundsatz des Bundes-Immissionsschutzgesetzes' in *Deutsches Verwaltungsblatt* (1980) at 133–9.

[18] Rat von Sachverständigen für Umweltfragen, *Umweltprobleme der Nordsee* (Stuttgart: Kiepenheuer & Witsch, 1980) at 444–6.

lished as one of the fundamental principles of German policy affecting health and the environment.[19]

As different governments react differently on these issues, the process of science assessment itself can become a source of uncertainty or strong disagreement.[20] However, as explained by von Moltke, the precautionary principle identifies and addresses a common dilemma faced by all public authorities: how to deal with risks, primarily from technological developments, when the scientific basis is uncertain.[21] This arises from the emergence of technological processes where not only the occurrence of certain hazards is uncertain but even the risks associated with such occurrences remain uncertain.

The relationship between risk assessment and precaution can sometimes be unclear. Despite different requirements, each risk assessment carries immanently (due to its intrinsically predictive or forward looking nature) an element of uncertainty.[22] Thus precaution cannot be replaced by an extensive risk assessment, but rather, should become an integral part of it.[23]

Recent analysis by the European Communities (EC) in the context of the WTO Committee on Trade and Environment deliberations, and by Perrez *et al*, with the Geneva Environment Network (GEN) and the Swiss Agency for Cooperation and Development, has further defined the precautionary principle. This work suggests that the precautionary principle reveals two quite distinct aspects. First, there is the political decision to act or not to act, which is linked to the factors triggering recourse to the precautionary principle. Second, if an action is taken, the principle is meant to guide how to act (measures resulting from application of the precautionary principle). According to the analysis, it is possible to lay out some of the primary factors:

### 2.1.1 Triggers for recourse to the precautionary principle

The precautionary principle is not intended to justify the adoption of arbitrary decisions. It is considered relevant only in the event of a potential risk, particularly if the risk cannot be fully demonstrated, quantified or its effects determined due to insufficient or inconclusive scientific data. The precautionary principle can also be triggered by a correlation between the potential of a certain risk and the consequences. If the weight of the legal good in danger is very high, such as human life, the correlating risk can be minimal but still require measures based on the precau-

[19] See G. Hartkopf and E. Bohne, *Umweltpolitik, vol 1: Grundlagen, Analysen, und Perspektiven* (Opladen: Westdeutscher Verlag, 1983) at 112–13.

[20] A recent US publication provides a guide to an established practice, with some important hortatory remarks about the difficulty in conducting risk assessments about biological systems, see *Resources for the Future, Understanding Risk Analysis. A Short Guide for Health, Safety, and Environmental Policy-Making* (Washington, DC: American Chemical Society, 1998). For a different approach, see the more theoretical exploration of issues that are still viewed as entirely in flux, in A. Stirling *et al*, *On Science and Precaution in the Management of Technological Risk*, Final Report of a project for the EC Forward Studies Unit (Brussels, May 1999).

[21] K. von Moltke, *The Precautionary Principle* (Winnipeg: IISD, 2000).

[22] See analysis on risk assessment, R. Howse, 'Democracy, Science, and Free Trade: Risk Regulation on Trial at the World Trade Organisation', *Michigan Law Review* (June 2000) 2329, 2340; also D.A. Wirth, 'International Trade Agreements: Vehicles for Regulatory Reform?', *U Chi Legal F* (1997) 331. Sometimes the reluctance of the USA to accept the precautionary principle is explained with a different concept of risk assessment in US law.

[23] See most recently the European Court of First Instance, Case T-13/99, *Pfizer Animal Health SA v Council of the European Union* [11.9.02], which we analyse in further detail below.

tionary principle.[24] Before the principle is invoked, it is necessary to identify the potentially negative effects of an action. To understand these effects more thoroughly, scientific research will often be required. Once potential effects are identified, a risk assessment can be carried out.[25] Where possible, a report assesses existing knowledge and available information, providing the views of scientists on reliability of the assessment, remaining uncertainties and topics for further scientific research. Where it is not possible to complete a comprehensive assessment of risk, all effort is made to evaluate available scientific information. Scientific uncertainty results usually from five characteristics of the scientific method: the variable chosen, the measurements made, the samples drawn, the models used and the causal relationship employed. Scientific uncertainty may also arise from a controversy on existing data or lack of some relevant data, and may relate to qualitative or quantitative elements of the analysis.[26] Risk evaluators accommodate these uncertainty factors by incorporating different cautionary aspects in their research methods.[27] Risk managers should be fully aware of these uncertainty factors when they adopt measures based on the scientific opinion delivered by evaluators. However, in some situations scientific data is not sufficient to allow one to apply these cautionary aspects in practice. As such, identification of potentially negative effects resulting from a product or process, coupled with a scientific evaluation of risks which, due to insufficient, inconclusive or imprecise data, can make it impossible to determine with sufficient certainty the risk in question. It is in situations like these that decision-makers face the dilemma of having to act or not act.

### 2.1.2 Measures resulting from reliance on the precautionary principle

In the above-mentioned sort of situation, under varying degrees of pressure from public opinion, decision-makers have to respond. Responding does not necessarily mean that measures always have to be adopted—the decision to do nothing may be a response in its own right. The appropriate response in a given situation is thus the result of a political decision, a function of the risk level that is 'acceptable' to the society upon which the risk is imposed. Recourse to the precautionary principle does not necessarily mean adopting final instruments designed to produce legal effects

[24] See L.B. de Chayournes, 'The Precautionary Principle' in F. Perrez, *Precaution from Rio to Johannesburg* (Geneva: GEN & SADC, 2002).

[25] Assessments require reliable scientific data and logical reasoning, leading to conclusions which outline the probability and severity of a hazard's impact on the environment or health of a given population including the extent of possible damage, persistency, reversibility and delayed effect. They consist of four components—hazard identification, hazard characterisation, appraisal of exposure and risk characterisation. The limits of scientific knowledge may affect each of these components, influencing overall uncertainty and ultimately affecting the foundation for protective or preventive action. An attempt to complete these four steps is performed before a decision to act is taken.

[26] According to the EC project 'Technological Risk and the Management of Uncertainty', being presently conducted under the auspices of the European Scientific Technology Observatory, a more abstract and generalised approach preferred by some scientists is to separate all uncertainties into three categories of bias, randomness and true variability. Other experts categorise uncertainty in terms of estimation of confidence interval of the probability of occurrence and of the severity of the hazard's impact.

[27] For example, in toxicity analysis, they can rely on animal models to establish potential effects in man; use body weight ranges to make inter-species comparisons; adopt a safety factor in evaluating an acceptable daily intake to account for intra- and inter-species variability; the magnitude of this factor depends on the degree of uncertainty of the available data; not adopt an acceptable daily intake for substances recognised as genotoxic or carcinogenic; and adopt the 'ALARA' (as low as reasonably achievable) level as a basis for certain toxic contaminants.

subject to judicial review. The nature of the decision influences the type of control that can be carried out. There is a whole range of actions available to decision-makers. The decision to fund a research programme or even the decision to inform the public about the possible adverse effects of a product or procedure may themselves be inspired by the principle.[28]

### 2.1.3 Guidelines for the precautionary principle: proposed by the EC

The implementation of the principle starts with a scientific evaluation, as complete as possible, and where possible, identifying at each stage the degree of scientific uncertainty. Decision-makers obtain, through a structured approach, a scientific evaluation of the risk to the environment or health, in order to select the most appropriate protective measures or course of action. Action includes a decision to commission scientists to cast light on existing objective evidence, gaps in knowledge and scientific uncertainties. This shows if the desired level of protection for the environment or a population group could be jeopardised. The conclusions also include an assessment of the scientific uncertainties and a description of the hypotheses used to compensate for the lack of the scientific or statistical data. All interested parties are involved to the fullest extent possible in the study of various risk management options that may be envisaged, and the procedure is meant to be as transparent as possible. Once results of the scientific evaluation or risk assessment are available, an assessment of the potential consequences of inaction and of the uncertainties of the scientific evaluation is considered by decision-makers when determining whether to trigger action based on the precautionary principle. The absence of scientific proof of the existence of a cause-effect relationship, a quantifiable dose/response relationship or a quantitative evaluation of the probability of the emergence of adverse effects following exposure is not be used to justify inaction. Even if scientific advice is supported only by a minority fraction of the scientific community, due account is taken of their views, provided the credibility and reputation of this fraction are recognised. In WTO law Article 5(7) SPS although only designed for provisionally, i.e. transitorily, measures requires the same step-by-step procedure. The provision, that according to the Appellate Body incorporates the precautionary principle,[29] has to be reviewed in a 'reasonable period of time'. A relatively recent EC report proposes general methods of application for the precautionary principle, though this approach is still subject of much debate.[30]

[28] For an excellent early analysis of the principle and its development, see supra, n 13.

[29] *EC/Hormones*, AB Report, para 120 and confirmed in *Japan/Agricultural Products* (AB-1998–8), WT/DS76/AB/R [22.2.99] para 81.

[30] These include proportionality; non-discrimination; consistency; examination of the benefits and costs of action or lack of action; and examination of scientific developments. They are defined as:

— *Proportionality* means that measures are proportional to the desired level of protection. The measures envisaged make it possible to achieve the appropriate level of protection, and they are not disproportionate to the desired level of protection, nor do they aim at zero risk, something which rarely exists. However, in certain cases, an incomplete assessment of the risk considerably limits the number of options available to the risk managers, or a total ban is the sole possible response to a potential risk. Risk reduction measures also include less restrictive alternatives which make it possible to achieve the desired level of protection, such as appropriate treatment, reduction of exposure, tightening of controls, adoption of provisional limits, recommendations for populations at risk, or replacing the products or procedures concerned by safer products or procedures. In addition, risk reduction measures are not limited to immediate risks where the proportionality of the action is easier to assess. The precautionary principle is most often invoked in situations where adverse effects do not emerge until long after exposure, hence cause-effect

### 2.1.4 The burden of proof

Measures based on the precautionary principle may assign responsibility for producing the scientific evidence necessary for a comprehensive risk evaluation. Legislators, by way of precaution, can reverse the burden of proof by requiring that questionable substances be deemed hazardous until proven otherwise, and the business community carries out the scientific work needed to evaluate the risk. As long as human health risk cannot be evaluated with sufficient certainty, legislators are not legally entitled to authorise use of substances unless exceptionally for test purposes. For example, often prior approval (positive listing) is required before the placing certain products on the market (drugs, pesticides or food additives). This is one way of applying the precautionary principle, by shifting responsibility for producing scientific evidence, and it applies in particular to *a priori* hazardous substances or those which are potentially hazardous at a certain level of absorption. This procedure might appear similar to a risk assessment, which relies on science-based information and non-science value-judgment, but the purpose of the precautionary principle is broader. It can indeed assist decision-makers in a risk management situation. Precaution and the revised burden of proof will ease potentially close decisions in a risk assessment.

In other cases, where such procedures do not exist, users, private individuals, con-

relationships are more difficult to prove scientifically. Potential long-term effects are taken into account in evaluating the proportionality of rapid actions to limit or eliminate a risk whose effects will not surface until ten or twenty years later or will affect future generations. This applies in particular to effects on the eco-system.

— *Non-discrimination* means that comparable situations should not be treated differently and different situations should not be treated in the same way, unless there are objective grounds for doing so. Measures taken under the precautionary principle are designed to achieve an equivalent level of protection without invoking the geographical origin or the nature of the production process to apply different treatments in an arbitrary manner.

— *Consistency* means being consistent with measures already adopted in similar circumstances or using similar approaches. Risk evaluations include a series of factors to be taken into account to ensure that they are as thorough as possible. The goal is to identify and characterise the hazards, notably by establishing a relationship between the dose and the effect and assessing the exposure of the target population or the environment. If the absence of certain scientific data makes it impossible to characterise the risk, taking into account the uncertainties inherent to the evaluation, the measures taken under the precautionary principle should be comparable in nature and scope with measures already taken in equivalent areas in which all the scientific data are available.

— *Examination of the benefits and costs of action and lack of action* means making a comparison between the most likely positive or negative consequences of the envisaged action and those of inaction in terms of the overall cost to proponents, both in the long- and short-term. The measures envisaged must produce an overall advantage as regards reducing risks to an acceptable level. Examination of the pros and cons cannot be reduced to an economic cost-benefit analysis. It is wider in scope and includes non-economic considerations. However, it should include an economic cost-benefit analysis where this is appropriate and possible. Other analysis methods, such as those concerning the efficacy of possible options and their acceptability to the public, are also taken into account. A society may be willing to pay a higher cost to protect an interest, such as the environment or health, to which it attaches priority. Many societies consider that concerns linked to the protection of public health should be given greater weight than economic considerations.

— *Examination of scientific developments* means maintaining measures adopted for as long as the scientific data are inadequate, imprecise or inconclusive, and as long as the risk is considered too high to be imposed on society. The measures may have to be modified or abolished by a particular deadline, in the light of new scientific findings, but this usually linked development of scientific knowledge not a timing factor. Scientific research is carried out with a view to obtaining a more advanced or more complete scientific assessment. In this context, measures are subjected to regular scientific monitoring, so that they can be re-evaluated in the light of new scientific information. Research is also conducted for the improvement of the methodologies and instruments for assessing risk, including greater integration of all pertinent factors (e.g. socio-economic information, technological perspectives).

sumer associations, citizens or public authorities can demonstrate the nature of a danger and the level of risk posed by a product or process. Precautionary principle methods can also reverse the burden of proof and place it on the producer, manufacturer or importer, but such an obligation cannot be systematically entertained as a general principle. It is a case-by-case aspect of precautionary measures, and can mean only the provision of supplementary scientific data, giving professionals who have an economic interest in the production and/or marketing of the procedure or product in question the opportunity to finance the necessary research on a voluntary basis.

As such, the precautionary principle is far from vague or imprecise. Indeed, it can be considered a reasonable, transparent policy option for decisions being taken in the face of scientific uncertainly after assessments or evaluations have been carried out. It leads to various policy options, not just total bans. It can be triggered by specific situations, and experience suggests it incorporates proportionality; non-discrimination; consistency; examination of the benefits and costs of action (or lack of action); and examination of scientific developments. It provides for recognition of reputable minority scientific views, and reversal of the burden of proof. Actions based on the precautionary principle are also subject to periodic review. However, while the principle is a useful tool, where has it become part of international law? And as such, is it part of WTO law and where does it apply in the international trade regime?

## 2.2 The Precautionary Principle in International Law

The precautionary principle is becoming increasingly relevant as an international legal measure to guide decision-making in the face of scientific uncertainty. It is reflected in a growing body of legal instruments which form part of developing international customary and treaty regimes.[31] This is evident on three levels. First, the precautionary principle is emerging as a guiding norm in international environmental law on a global level. Second, high levels of support for the principle exist in the world's most advanced economic integration regime, the European Union. This is illustrated in recent judgments of the European Court of Justice and Court of First Instance, as well as in numerous policy documents. The overall positive and quite practical experiences with the principle in this region may inspire international acceptance. Third, while differing views still exist on a global level, particularly in international economic debates, there is potential for eventual recognition in the slower and more cautious development of WTO/GATT law, through incremental treaty and jurisprudential steps. In this section, we will address each aspect in turn.

### 2.2.1 Precaution in international environmental law

The concept of the precautionary principle is part of a developing body of international law, particularly in international environmental law.[32] The most familiar elaboration can be found at Article 15 of the 1992 Rio Declaration on Environment and Development:

> In order to protect the environment, the precautionary approach should be widely applied by States according to their capabilities. Where there are threats of serious or irreversible

[31] Supra, n 15 at 63.
[32] Supra, n 13 at 97–108.

damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.[33]

Since then the precautionary principle has been implemented in various environmental instruments, and in particular in global climate change, ozone-depleting substances and biodiversity conservation. Indeed, it is possible to suggest that this concept is, while binding in most areas of international environmental law, in the rapid process of becoming international customary law.[34]

Precaution has received specific elaborations in treaty law.[35] In international jurisprudence the recognition has not been as explicit. In the *Southern Bluefin Tuna* provisional order of the International Tribunal of the Law of the Seas, the principle is not explicitly stated in the majority judgment, though Japan was ordered to suspend 'experimental' fishing (which had the potential to critically deplete stocks) on essentially precautionary grounds.[36]

[33] *Rio Declaration on Environment and Development*, Principle 15, 14.6.92, UN Doc: A/Conf 151/5/Rev 1 (1992), reprinted in 31 ILM 876 (1992). Since this statement, the precautionary principle has gained acceptance in recent years and is increasingly reflected in international treaty law, appeared with frequency and growing degrees of formal recognition. At first, in 1987, the principle was recognised in the Ministerial Declaration of the Second International Conference on the Protection of the North Sea, which stated that 'in order to protect the North Sea from possibly damaging effects of the most dangerous substances, a precautionary approach is necessary which may require action to control inputs of such substances even before a causal link has been established by absolutely clear scientific evidence'. Later, the 1990 Ministerial Declaration of the Third International Conference on the Protection of the North Sea fleshed out the earlier declaration, stating that 'the participants . . . will continue to apply the Precautionary Principle, that is to take action to avoid potentially damaging impacts of substances that are persistent, toxic and liable to bioaccumulate even where there is no scientific evidence to prove a causal link between emissions and effects'.

[34] See J. Cameron and J. Abouchar, 'The Precautionary Principle: A Fundamental Principle of Law and Policy for the Protection of the Global Environment', 14 (1991) *Boston CICLR* 1; also supra, n 15 at 286.

[35] Principle 15 is reproduced in similar wording in the preamble of the 1992 Convention on Biological Diversity, which notes 'that where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimise such a threat'. It also appears in Article 3 (Principles) of the 1992 Framework Convention on Climate Change, where is it stated that:

'The Parties should take precautionary measures to anticipate, prevent or minimise the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost. To achieve this, such policies and measures should take into account different socio-economic contexts, be comprehensive, cover all relevant sources, sinks and reservoirs of greenhouse gases and adaptation, and comprise all economic sectors. Efforts to address climate change may be carried out cooperatively by interested Parties.'

In the 1992 Paris Convention for the Protection of the Marine Environment of the North-East Atlantic, the precautionary principle is defined as the principle 'by virtue of which preventive measures are to be taken when there are reasonable grounds for concern that substances or energy introduced, directly or indirectly, into the marine environment may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between the inputs and the effects'.

At the Conference of the Parties to the Convention on Biological Diversity, the 2000 Cartagena Protocol on Biosafety concerning the safe transfer, handling and use of living modified organisms resulting from biotechnology confirmed the key function of the precautionary principle. Article 10, para 6 states: 'Lack of scientific certainty due to insufficient relevant scientific 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 living modified organism in question . . . , in order to avoid or minimise such potential adverse effects.'

[36] See Cases 3 and 4, *New Zealand and Australia v Japan* [27.8.99] published at www.un.org/Depts/los/ITLOS/Tuna_cases.htm. The separate opinion of Judge Tullio Treves explains:

'While, of course, a precautionary approach by the parties in their future conduct is necessary, such precautionary approach, in my opinion, is necessary also in the assessment by the Tribunal of the urgency of the

This suggests that the principle, despite a lack of recognition by international tribunals, is part of international customary law that applies in specific environmental situations. This however does not mean that *ipso facto*, it can be applied to problems outside the environmental field, such as international trade law, or even further, that it is a general principle of international law.[37]

However, the increasing incidence of recognition in international legal developments is well documented and can readily be traced in Organisation for Economic Cooperation and Development (OECD) studies.[38] Governments everywhere are under an obligation to protect their citizens from harm from known and recognisable hazards that threaten life and property. While the actual occurrence of harm may be unpredictable, the harmful effects of certain occurrences—floods, storms, pest outbreaks or the like—are generally well-known. The usual response is prevention, supported by emergency measures when harmful events nevertheless occur. The 'precautionary principle' addresses the cases where lack of knowledge persists. It underlines that governments nowadays have an obligation to act, even in the face of enduring scientific uncertainty. It promises to remain a central tenet of international environmental law for a long time to come.

### 2.2.2 Precaution in the European Union and the European Court of Justice

The institutions of the European Union (EU) have essentially adopted the precautionary principle in international environmental law and practice. This is not surprising. Relations between the EU and member states are highly complex and characterised by numerous discontinuities. The flow of information between levels of governance is uncertain at the best of time and unreliable when it counts most, namely when the facts are controversial. As such, risk assessment presumably has great attractions for the institutions of the European Union, though the European Commission has essentially linked the use of risk assessment with the application of the precautionary principle. This approach is not without history. In 1977, the Commission of the European Communities announced that it was planning to propose a directive on environmental assessment that would need to be implemented in all member states, and due to widely differing responses of members, the legislative process took eight years.[39]

To fully understand the use of the precautionary principle in the European Union,

measures it might take. In the present case, it would seem to me that the requirement of urgency is satisfied only in the light of such precautionary approach. I regret that this is not stated explicitly in the Order.

I fully understand the reluctance of the Tribunal in taking a position as to whether the precautionary approach is a binding principle of customary international law. Other courts and tribunals, recently confronted with this question, have avoided to give an answer. In my opinion, in order to resort to the precautionary approach for assessing the urgency of the measures to be prescribed in the present case, it is not necessary to hold the view that this approach is dictated by a rule of customary international law. The precautionary approach can be seen as a logical consequence of the need to ensure that, when the arbitral tribunal decides on the merits, the factual situation has not changed. In other words, a precautionary approach seems to me inherent in the very notion of provisional measures. It is not by chance that in some languages the very concept of "caution" can be found in the terms used to designate provisional measures: for instance, in Italian, misure cautelari, in Portuguese, medidas cautelares, in Spanish, medidas cautelares or medidas precautorias.'

[37] G. Marceau, 'The Precautionary Principle under WTO Law' in F. Perrez, *Precaution from Rio to Johannesburg* (Geneva: GEN & SADC, 2002).

[38] See for example 'Major National Environmental Laws, OECD Countries 1956–78 and 1979–84', Table 21 in OECD, *The State of the Environment 1985* (Paris: OECD, 1985) 242.

[39] Nigel Haigh (ed.), *Manual of Environmental Policy: The EC and Britain* (London: Cartermill) looseleaf, section 11(2).

it is necessary to examine the legislative texts, the case law of the Court of Justice and the Court of First Instance, and the policy approaches that have emerged.

Recent analysis starts with the legal texts which explicitly or implicitly refer to the precautionary principle. At Community level, the only explicit reference to the precautionary principle is found in the environment title of the EC Treaty, and more specifically Article 174, which incorporates provisions already introduced by the 1992 Maastricht Treaty, stating:

2. Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the Precautionary Principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay . . .
3. In preparing its policy on the environment, the Community shall take account of: available scientific and technical data, . . . the potential benefits and costs of action or lack of action . . .

One cannot conclude from this that the principle applies only to the environment. Although the principle is found in the environment title of the Treaty, it is not defined there. Article 6 of the EC Treaty provides that:

environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development.

Article 95(3) provides that:

The Commission, in its proposals envisaged in paragraph 1 concerning health, safety, environmental protection and consumer protection, will take as a base a high level of protection, taking account in particular of any new development based on scientific facts. Within their respective powers, the European Parliament and the Council will also seek to achieve this objective.

The first paragraph of Article 152 of the EC Treaty also provides that:

A high level of human health protection shall be ensured in the definition and implementation of all Community policies and activities.

As such, like other general notions contained in legislation, decision-makers and the courts ultimately flesh out the principle. The scope of the precautionary principle also depends on trends in case law, as influenced by prevailing social and political values. Community authorities' practical experience and its judicial review are slowly building a more detailed notion of the precautionary principle.

The Court of Justice of the European Communities and the Court of First Instance have already had occasion to review the application of the Precautionary Principle in cases they have adjudicated and hence to develop case law in this area. In its judgment on the validity of the Commission's decision banning the exportation of beef from the United Kingdom to reduce the risk of BSE transmission, the Court held:

Where there is uncertainty as to the existence or extent of risks to human health,

the institutions may take protective measures without having to wait until the reality and seriousness of those risks become fully apparent. (Grounds 99)[40]

The next statement details the Court's reasoning:

> That approach is borne out by Article 130r(1) of the EC Treaty, according to which Community policy on the environment is to pursue the objective inter alia of protecting human health. Article 130r(2) provides that that policy is to aim at a high level of protection and is to be based in particular on the principles that preventive action should be taken and that environmental protection requirements must be integrated into the definition and implementation of other Community policies. (Grounds 100)[41]

In another judgment concerning protection of consumer health,[42] the Court of First Instance cites the above passage from the BSE judgment. These cases take place in a wider policy context, particularly with regard to the balancing of public health and economic interests in the European Communities. In a more recent case, the President of the Court of First Instance confirmed the positions expressed in the abovementioned judgments. This judgment contained an explicit reference to the precautionary principle and affirmed that 'requirements linked to the protection of public health should undoubtedly be given greater weight than economic considerations'.[43] It has since been re-emphasised that in Europe, the requirements of the protection of public health must unquestionably be given precedence over economic considerations.[44] Indeed, this principle can now be tracked through European case law.[45] It is also apparent from European case law that, particularly where harm depends on the occurrence of a number of factors, it is enough for that harm to be foreseeable with a sufficient degree of probability.[46]

In a more recent case, the Court of First Instance further clarified the relationship between risk assessment and precaution. The case concerned the use of antibiotics in animal feed. In the mid-1990s the fear of resistance and cross-resistance of bacteria rose and several international and Community bodies, including the World Health Organisation, recommended the withdrawal of the authorisation of certain antibiotics in feedstuff. After several reports indicated the potential of animal antibiotics creating human resistance the European Council adopted in December 1998 regulation which deleted *inter alia* the antibiotic virginiamycin from the Directive governing permitted animal feed additives, prohibiting the use of the substance. When the contested regulation was adopted, Pfizer Animal Health SA ('Pfizer') was

[40] Judgments of 5 May 1998, Cases C-157/96 and C-180/96.

[41] This principle means that the Commission may take protective measures without having to wait until the reality and seriousness of those risks become fully apparent. See Case C-157/96 *National Farmers Union and Others* [1998] ECR I-2211 at para 63.

[42] Judgment of 16 July 1998, Case T-199/96, Grounds 66 and 67.

[43] Order of the President of the Court of First Instance, Case T-70/99 R *Alpharma v Commission* [30.6.99] ECR II-2027 at para 152.

[44] Case C-471/00 P(R). Appeal: Order of the President of the Court of First Instance in Proceedings for Interim Relief—Withdrawal of Marketing Authorisations for Medicinal Products for Human Use Containing Phentermine—Second Directive 75/319/EEC—Urgency—Balancing of Interests.

[45] See Order of the Court of Justice in Case C-180/96 R *United Kingdom v Commission* [1996] ECR I-3903 at para 93; judgment in Case C-183/95 *Affish v Rijksdienst Keuring Vee en Vlees* [1997] ECR I-4315 at para 43; order of the Court of First Instance in Case T-136/95 *Industria del Frio Auxiliar Conservera v Commission* [1998] ECR II-3301 at para 58.

[46] See, in particular, the orders in Case C-280/93 R *Germany v Council* [1993] ECR I-3667 at para 34, and in Case C-335/99 P(R) *HFB and Others v Commission* [1999] ECR I-8705 at para 67.

the only producer in the world of virginiamycin.[47] In substance,[48] Pfizer argued that the regulation violated (among others) the precautionary principle and the principle of proportionality. Both parties agreed that, at the time when the contested regulation was adopted, neither the reality nor the seriousness of the risk had been scientifically proven.[49] The court quickly concluded that the precautionary principle applies to health considerations,[50] then focused on its interpretation and upon whether Community institutions had correctly applied the principle.

In terms of the interpretation of the precautionary principle, Pfizer claimed that the Community institutions did not comply with the guidelines they had issued.[51] The court rejected the allegation in relation to the first paper because it was not issued officially by the Commission. With regard to the Commission's Communication, the court found this could not be literally applied since it was adopted later in time than the regulation. Nonetheless, the Commission alleged that this Communication reflected the praxis within the Commission at the time of the adoption of the regulation. Pfizer did not dispute the potential for preventive measures under the Directive but claimed that a risk assessment was necessary. The court thus examined the purpose of a risk assessment when the precautionary principle is applied. It decided that, 'in a situation in which the precautionary principle is applied, which by definition coincides with a situation in which there is scientific uncertainty, a risk assessment cannot be required to provide the Community institutions with conclusive scientific evidence of the reality of the risk and the seriousness of the potential adverse effects were that risk to become a reality'.[52] The court also provided limits, holding that (on the other hand) a purely hypothetical approach to the risk, founded on a mere conjecture, would in no case be sufficient. It therefore decided as a rule for the purpose of a risk assessment that:

Rather, it follows from the Community Courts' interpretation of the precautionary principle

[47] Before the final judgment Pfizer requested interim relief against the enactment of the regulation, which was not granted. By order of 30 June 1999 in Case T-13/99 R *Pfizer Animal Health v Council* [1999] ECR II-1961, the President of the Court of First Instance dismissed the application. Pfizer appealed against that order and its appeal was dismissed by order of the President of the Court of Justice of 18 November 1999 (Case C-329/99 P(R) *Pfizer Animal Health v Council* [1999] ECR I-8343).

[48] The case also involved difficult procedural issues which are not relevant in this analysis, see Case T-13/99, para 73 to 106.

[49] Ibid, para 113.

[50] Ibid, para 114: 'In accordance with Article 130r(2) of the EC Treaty (now, after amendment, Article 174(2) EC), the precautionary principle is one of the principles on which Community policy on the environment is based. It is not disputed by the parties that the principle also applies where the Community institutions take, in the framework of the common agricultural policy, measures to protect human health (see, to that effect, Case C-180/96 *United Kingdom v Commission* [1998] ECR I-2265, para 100, "the BSE judgment"; and Case C-157/96 *National Farmers Union and Others* [1998] ECR I-2211, para 64, "the *NFU* judgment"). It is apparent from Article 130r(1) and (2) of the Treaty that Community policy on the environment is to pursue the objective *inter alia* of protecting human health, that the policy, which aims at a high level of protection, is based in particular on the precautionary principle and that the requirements of the policy must be integrated into the definition and implementation of other Community policies. Furthermore, as the third subparagraph of Article 129(1) of the EC Treaty (now, after amendment, Article 152 EC) provides, and in accordance with settled case-law (see, to that effect, Case C-146/91 *KYDEP v Council and Commission* [1994] ECR I-4199, para 61), health protection requirements form a constituent part of the Community's other policies and must therefore be taken into account when the common agricultural policy is implemented by the Community institutions.'

[51] These guidelines are laid out in a paper dated 17 October 1998 entitled *Guidelines on the Application of the Precautionary Principle and the Communication from the Commission on the Precautionary Principle of 2 February 2000* (COM(2000)1, 'the Communication on the Precautionary Principle').

[52] Ibid, para 142.

that a preventive measure may be taken only if the risk, although the reality and extent thereof have not been 'fully' demonstrated by conclusive scientific evidence, appears nevertheless to be adequately backed up by the scientific data available at the time when the measure was taken.[53]

In other words a risk need not be fully demonstrated to be acceptable, but it cannot only be founded on mere hypotheses that have not been scientifically confirmed, either.

The case also addresses specific requirements for a risk assessment and takes the Communication on the Precautionary Principle[54] of the Commission 'as a codification of the law as it stood at the time when the contested regulation was adopted'.[55] The Communication sets out a two-fold task, which the court consequently analyses. This first requires determining what level of risk is deemed unacceptable and, second, conducting a scientific assessment of the risks.

Interestingly the court also finds that for the first component, the Community is bound by WTO rules, where it is specifically provided that members of that organisation may determine the level of protection which they deem appropriate.[56] The court concludes that was done. For the scientific risk assessment the court refers to the 'common' definition at the international and the Community level 'as a scientific process consisting in the identification and characterisation of a hazard, the assessment of exposure to the hazard and the characterisation of the risk'.[57]

[53] Ibid, para 144.

[54] See supra, n 9.

[55] Ibid, para 149.

[56] Specifically the: 'Agreement on the Application of Sanitary and Phytosanitary Measures, which is set out in Annex 1A to the Agreement establishing the WTO, as approved by Council Decision 94/800/EC [22.12.94] concerning the conclusion on behalf of the European Community, as regards matters within its competence, of the agreements reached in the Uruguay round multilateral negotiations (1986–94) (OJ/L 336 [1994] 1), see the sixth recital to, and Article 3(3) of, the Agreement and the Report of the Appellate Body of the WTO of 16 January 1998 on Community measures concerning growth hormones, particularly paragraphs 124 and 176.' See ibid, para 150.

[57] Ibid, para 151 with reference to the provisional communication from the Codex Alimentarius Commission, and the Communication on the Precautionary Principle, the Communication on Consumer Health and Food Safety and the green paper. Here, the court states that:

160: . . . Second, it is common ground between the parties that, when the precautionary principle is applied, it may prove impossible to carry out a full risk assessment, as defined at paragraph 156 above, because of the inadequate nature of the available scientific data. A full risk assessment may require long and detailed scientific research. The case-law cited at paragraph 139 above shows that unless the precautionary principle is to be rendered nugatory, the fact that it is impossible to carry out a full scientific risk assessment does not prevent the competent public authority from taking preventive measures, at very short notice if necessary, when such measures appear essential given the level of risk to human health which the authority has deemed unacceptable for society . . . 165: . . . Rather, the Community institutions must show, first, that the contested regulation was adopted following as thorough a scientific risk assessment as possible, which took account of the particular circumstances of the present case, and, second, that they had available, on the basis of that assessment, sufficient scientific indications to conclude, on an objective scientific basis, that the use of virginiamycin as a growth promoter constituted a risk to human health . . . 167: . . . It follows that, in this instance, the Community institutions enjoyed a broad discretion, in particular when determining the level of risk deemed unacceptable for society . . . 168: . . . Furthermore, it is settled case-law that where a Community authority is required to make complex assessments in the performance of its duties, its discretion also applies, to some extent, to the establishment of the factual basis of its action (see, to that effect, Case 138/79 *Roquette Frères v Council* [1980] ECR 3333, para 25; Joined Cases 197/80 to 200/80, 243/80, 245/80 and 247/80 *Ludwigshafener Walzmühle v Council and Commission* [1981] ECR 3211, para 37; Case C-27/95 *Bakers of Nailsea* [1997] ECR I-1847, para 32; Case C-4/96 *Nifpo and Northern Ireland Fishermen's Federation* [1998] ECR I-681, paras 41 and 42;Case C-120/97 *Upjohn* [1999] ECR I-223, para 34; and *Spain v Council*, cited at para 115 above, para 29) . . . 170: . . . In particular, under the precautionary principle the Community institutions are entitled, in the interests of human

The court then engages in a detailed analysis of the evidence before it, finally finding that indeed a risk (not just the hypothesis of one) existed, and that the Community institutions had acted well within their discretion.[58]

On 13 April 1999, the Council adopted a Resolution urging the Commission, *inter alia*, 'to be in the future even more determined to be guided by the Precautionary Principle in preparing proposals for legislation and in its other consumer-related activities and develop as a priority clear and effective guidelines for the application of this principle'.

Hence, in Europe, the precautionary principle is generally accepted, and it is particularly relevant to environmental protection and human, animal and plant health. It is also well integrated in the risk assessment necessary under WTO law, especially under the SPS obligations. The Community has consistently endeavoured to achieve a high level of protection, among others in environment and human, animal or plant health. In most cases, measures are determined on a satisfactory scientific basis. However, when there is reasonable ground for concern that potential hazards may affect the environment or human, animal or plant health and lack of available data precludes a detailed risk evaluation, the precautionary principle has been politically accepted as a risk management strategy in several fields.

Indeed, the level of acceptance for the principle in the EU demonstrates the possibility of formulating international legal precepts that can be transposed into widely differing national systems of law and administration with the ultimate purpose of producing comparable outcomes in practice. This experience is a possible inspiration for greater acceptance of the principle in global legal systems, such as into the GATT/WTO law. As noted above, while global policy statements and treaty law sufficed, the EU's principal application of the precautionary principle has been through its development in the jurisprudence. As such, perhaps the dispute settlement mechanisms of the WTO, particularly the Appellate Body, have an important role to play in incrementally advancing acceptance and definition of the principle in WTO law.[59] To examine this idea more closely, it is important to take a look at how WTO/GATT law takes the precautionary principle into account, pinpointing places where development is possible.

### 2.2.3 Precaution in WTO/GATT law

It can be argued that the precautionary principle already exists in certain aspects of WTO/GATT law, and that it is being brought into WTO case law with mixed results. But where does the principle exist in WTO/GATT law, and what is the link between GATT/WTO law and other legal systems?

No WTO agreement contains the precautionary principle *expressis verbis* but different provisions can be seen as incorporating the *ratio* of the precautionary principle. The WTO Agreement on the Application of Sanitary and Phytosanitary Measures (WTO SPS Agreement) has incorporated the principle for example in Article 5(7) SPS as ruled by the Appellate Body (AB).[60] The same applies to the sixth paragraph

health to adopt, on the basis of as yet incomplete scientific knowledge, protective measures which may seriously harm legally protected positions, and they enjoy a broad discretion in that regard.

[58] Court of First Instance, Case T-13/99, *Pfizer Animal Health SA v Council* [11.9.02].

[59] For a more detailed analysis see, J. Wiers, *Trade and Environment in the EC and the WTO* (Groningen, 2002) 408.

[60] See *EC/Hormones*, AB Report, para 120 and confirmed in *Japan/Agricultural Products* (AB-1998–8), WT/DS76/AB/R [22.2.99] para 81.

of the Preamble and to Article 3(3) SPS, because these explicitly recognise the right of Members to establish their own appropriate level of sanitary protection, which may be higher (i.e. more cautious) than that implied in existing international standards, guidelines and recommendations.[61] More tenuous references are also found in the Preamble of the WTO Agreement. The WTO system, as any other legal subsystem, is not isolated from the widespread sources of public international law. As such, it can be proposed that when provisions are not specifically related to the SPS Agreement, GATT/WTO law should still take the precautionary principle into account where useful.

Although the term 'precautionary principle' is not explicitly used in the SPS Agreement, the AB in the *EC/Hormones* report stated that it finds reflection in Article 5(7). This reads:

> In cases where relevant scientific evidence is insufficient, a Member may provisionally adopt sanitary or phytosanitary measures on the basis of available scientific information, including that from the relevant international organisations as well as from sanitary and phytosanitary measures applied by other Members. In such circumstances, Members shall seek to obtain the additional information necessary for a more objective assessment of risk and review the sanitary or phytosanitary measure accordingly within a reasonable period of time.[62]

The SPS Agreement provides that measures adopted in the context of inadequate scientific evidence must respect certain conditions. For example, measures must be of a provisional nature pending the availability of more reliable scientific data, and this provisional nature is linked to the development of scientific knowledge rather than to a time factor (research must be carried out to elicit the additional scientific data required for a more objective assessment of the risk). In addition, measures must be periodically reviewed to take account of new scientific data. The results of scientific research should make it possible to complete risk evaluation and if necessary to review the measures on the basis of the conclusions. Hence the reasonable period envisaged in the SPS Agreement includes the time needed for completion of the necessary scientific work and if necessary, that needed for performance of a risk evaluation based on the conclusions of this scientific work. In addition, it should not be possible to invoke budgetary constraints or political priorities to justify excessive delays in obtaining results, re-evaluating the risk or amending the provisional measures. However, these conditions concern only the scope of the SPS Agreement, and the specific nature of certain sectors, such as environment or health policy, may mean that somewhat different principles have to be applied.

The Appellate Body in *Japan/Varietals* clarifies the four requirements which must be met in order to adopt and maintain provisional SPS measures.[63] A Member may provisionally adopt an SPS measure if the measure is: (1) imposed in respect of a situation where 'relevant scientific information is insufficient'; and (2) adopted 'on the basis of available pertinent information'. Such a provisional measure may not be maintained unless the Member which adopted the measure: (3) 'seek(s) to obtain the additional information necessary for a more objective risk assessment'; and (4)

[61] Ibid, para 124.
[62] *EC Measures Concerning Meat and Meat Products (Hormones)* WT/DS26/AB/R, WT/DS48/AB/R [13.2.98] para 124.
[63] *Japan/Measures Affecting Agricultural Products* WT/DS76/AB/R [19.3.99].

'review(s) the . . . measure accordingly within a reasonable period of time'.[64] These four requirements are clearly cumulative and are equally important for the purpose of determining consistency with the provisions of Article 5(7). Whenever one of these four requirements is not met, the measure is inconsistent with Article 5(7). As to what constitutes a 'reasonable period of time' to review the measure, the AB points out that this has to be established on a case-by-case basis and depends on the specific circumstances of each case, including the difficulty of obtaining the additional information necessary for the review *and* the characteristics of the provisional SPS measure.[65] The Appellate Body agreed with the panel that several years as in the *Japan/Varietals* case would exceed this period.[66] The principle and the conditions which determine consistency are in accordance with the precautionary principle as described above and as such, the SPS Agreement can be said to incorporate a precautionary element into the WTO.

This is more clearly explained by the Appellate Body in the *Hormones* report, which recognised . . . 'that there is no need to assume that Article 5(7) exhausts the relevance of a Precautionary Principle'.[67] In this report, it was recognised that Members have the 'right to establish their own level of sanitary protection, which level may be higher (i.e. more cautious) than that implied in existing international standards, guidelines and recommendations'. Furthermore, it accepted that 'responsible, representative governments commonly act from perspectives of prudence and precaution where risks of irreversible, for example, life-terminating, damage to human health are concerned'. The Body also[68] stated that some regard the precautionary principle as having reached the level of custom in the field of international environmental law, but held that it would be unnecessary to take a position on whether this yet had been authoritatively formulated as a general principle of international customary law. Indeed, in the *Hormones* and the *Japan/Varietals* cases, there was no need to define the legal value of precaution because the SPS Agreement incorporated many of the necessary elements in its treaty language.

In the *United States/Gasoline* report, the AB indicated that the WTO system, as any other legal subsystem, cannot be construed in a 'clinical isolation' from the widespread sources of public international law.[69] As detailed above, the precautionary principle is fast gaining legitimacy as a customary norm of public international law, and this should be reflected in WTO. It can also be suggested that the precautionary principle should taken into account in WTO law due to the commitment to sustainable development voiced in the Preamble to the WTO Agreement. Indeed, according to the Vienna Convention on the Law of Treaties, the object and purpose of a treaty can be deduced in part by consulting its preamble.[70] As such, references to sustainable development in the Preamble ought to be reflected in treaty interpretation, although it should be pointed out that the legal value of the language can in no way overturn the actual treaty obligations. But in the *US/Shrimp* case the Appellate Body decided

[64] Ibid, para 89.
[65] Ibid, para 93.
[66] Ibid.
[67] Supra, n 62.
[68] Ibid, para 123.
[69] *United States/Standards for Reformulated and Conventional Gasoline*, Panel Report WT/DS2/R [20.5.96] as modified by the AB Report AB-1996–1, WT/DS2/AB/R at para 17.
[70] AB Report in *EC/Customs Classification of Certain Computer Equipment* [22.6.98] WT/DS62/AB/R; WT/DS68/AB/R at para 88. See also I. Sinclair, *Vienna Convention on the Law of Treaties* (1980) pp 127 and 130.

that the preamble must add colour, texture and shading to our interpretation of the agreements annexed to the WTO Agreement.[71] As mentioned above, international law for sustainable development is fast recognising the precautionary principle as a central tenet in treaty and customary regimes.[72] One way to incorporate sustainable development goals into WTO law is to take the precautionary principle into account. Actually, Article 3(2) of the WTO *Understanding on Rules and Procedures Governing the Settlement of Disputes* dictates that WTO dispute settlement panels must clarify the terms of the WTO Agreement in accordance with customary rules of interpretation of public international law.[73] This principle is further recognised in the *United States/Shrimp* report of the AB, where international, conventional and customary principles are considered relevant aids to interpretation.[74] For these reasons, at a minimum the Appellate Body should use principles of international sustainable development law, including the precautionary principle, as a guide to interpretation of the WTO Agreement in the development of WTO jurisprudence.

There is also an important policy argument for taking the precautionary principle into account in WTO law. Scientific uncertainty is also part of the entire body of 'modern' domestic and international environmental law, as comprehensive legislation replaced traditional approaches to worker health and safety, the control of industrial facilities and land use planning. Since all governments face this dilemma of uncertainty in one form or another, the question is not whether precautionary measures are being taken but on what issues, on what basis, and with what safeguards to avoid arbitrary action. The principle is likely to become more rather than less important as time goes by. Thus, to contribute to a more coherent international legal order, it would be best to avoid a confrontation between the trade regime and environmental regimes on the issue of the precautionary principle. Such a confrontation would be damaging to all concerned, and hold the possibility of being truly devastating to the trade regime, as citizens in the developed world come to the conclusion that the perceived environmental 'price' for trade liberalisation is too high. Once this perception takes root it will be all but impossible to eradicate. From an international sustainable development law and policy perspective, therefore, the precautionary principle could, and should, be taken into account to guide interpretation of relevant aspects of the GATT 1994, including in the recent *Asbestos* case.

## 3. The Precautionary Principle in the WTO EC *Asbestos* Panel decision[75]

In its report, the original *EC/Asbestos* Panel considered the application of the WTO Agreement on Technical Barriers to Trade, Article III:4 and Article XX(b) of the

[71] See *United States/Import Prohibition of Certain Shrimp and Shrimp Products* WT/DS58/AB/R [20.9.99] para 153.

[72] See *International Law Association New Dehli Declaration on Principles of International Law concerning Sustainable Development*; Report of the UNCED, I (1992) UN Doc: A/CONF.151/26/Rev/1; Birnie and Boyle, *International Law and the Environment*, 2nd edn (Oxford, forthcoming) at ch 3; P. Sandsł *International Law in the Field of Sustainable Development* (1994) 65 BybIL at 303.

[73] Particularly those set out in Vienna Convention on the Law of Treaties, Articles 31, 32 and 33, (1969) UN Doc: A/CONF.39/27.

[74] Supra, n 71 at paras 130 and 154.

[75] Legally this report does not enter into the state practice of WTO law, since the decision is only adopted by the DSU as amended by the AB report. Nevertheless, the analysis of the panel report can explain the prior perception and might be adopted in a different context.

GATT 1994. The public health measure was saved by Article XX(b) of the GATT 1994—for the first time in the legal history of the GATT. However, while many agreed with the results of the panel's findings, questions remained as to whether the panel's reasoning was appropriate, especially considering the role of the legal precautionary principle in the reasoning. Serious concerns were raised within health and environment communities about the panel's 'like products' analysis, which public interest groups believed disregarded the fact that, unlike their substitutes, asbestos and asbestos fibres were potentially life-threatening.[76] This section details the findings and reasoning of the Panel in their original report, with particular regard to sustainable development concerns raised by the Panel's consideration of the like-product determination, the Article XX(b) exemption for the ban, and the WTO TBT Agreement analysis.

### 3.1 Article III GATT 1994: Health Risk is Not a Determinant in Commercially-Oriented Like-Product Analysis

A crucial point of the Panel's conclusions concerned the like-product analysis under Article III:4 of the GATT 1994. According to the Panel report, the broad and fundamental purpose of Article III is to ensure that internal measures not be applied to imported or domestic products so as to afford protection to domestic production. Toward this end, Aricle III obliges WTO members to provide equality of competitive conditions (National Treatment) for imported products in relation to domestic 'like' products.[77] The Panel noted that the AB in the *Japan/Taxes on Alcoholic Beverages* case asked Panels to 'apply their best judgment in determining whether in fact products are "like". While this determination will always involve an unavoidable element of individual, discretionary judgment',[78] previous panels have adopted general guidelines.[79] In the *Asbestos* case, however, the Panel used their discretion without respect for sustainable development objectives.

The EC argued that, among other criteria, when determining the properties, nature and quality of a product, toxicity should be taken into account. However, the panel found that the toxicity of a product had never been recognised as a criterion for the evaluation of likeness; asbestos and other fibres such as PVA, cellulose and glass fibres are still fibres and in cases of similar use should be treated as like products. A 'like product' determination is generally based on a consideration of four sets

[76] Supra, n 5. For reference to the carcinogenic nature of Chrysotile Asbestos, see e.g. *Monograph on the Evaluation of Carcinogenic Risk of Chemicals to Man: Asbestos* (Lyon: International Agency for Research on Cancer, 1977) vol 14 (recognised that all varieties of asbestos, including chrysotile, are carcinogenic and classified them as in Group 1, 'Known Carcinogens'); International Labour Organisation, *Convention Concerning Safety in the Use of Asbestos* (Convention No. 162), adopted 24 June 1986, http://www.ilo.org/public, Article 10 (recommended replacement of Asbestos by other materials and total prohibition in certain circumstances); World Health Organisation, *Chrysotile Asbestos Evaluated by Health Experts*, Press Release WHO/51/REV.1 (10.9.86) http://www.who.int/archives (recommended that asbestos, including chrysotile, should be replaced with safer substitutes); World Health Organisation, *Environmental Health Criteria (203): Chrysotile Asbestos* (International Programme on Chemical Safety, 1998) (recognised carcinogenic effects of chrysotile and reiterated calls for replacement of chrysotile).

[77] See *EC/Asbestos*, Panel Report at para 8.112.

[78] *Japan/Taxes on Alcoholic Beverages*, AB Report WT/DS8; DS10DS11/AB/R [1.11.96] at 23.

[79] In *Reformulated Gasoline*, the court considered the product's composition, customs classification, uses, purposes. In *Periodicals*, the relevant factors included the product's end-uses in a given market, consumers' tastes and habits, and the product's properties, nature and quality.

of inter-related factors: (1) the end use of the product, (2) consumer tastes and habits, (3) the innate properties, nature and qualities of the product, and (4) the tariff classification. According to the Panel report, the purpose of this determination is geared toward market access considerations, and whether the products at issue are competing. A scenario of competition between *asbestos* and the aptly named *asbestos substitutes* could be perceived as plausible. They added that no other panel had been called upon to examine the disputed risk of health impacts of a product itself, concluding that health aspects were dealt with in GATT Article XX(b) and, therefore, the toxicity of a product could not be taken into account in the like-product determination. The panel expressed concern that should the reverse be true, Members would be able to bypass the 'necessity test' of Article XX and its chapeau.[80]

This conclusion is the most contentious point in the report. In the *Asbestos* case, the panel determined 'likeness' while acknowledging that asbestos not only exposes human health to a potential risk, but is carcinogenic. Had it interpreted Article III:4 in the light of the precautionary principle, the panel would have taken the destructive health properties of asbestos into account. In accordance with the precautionary principle, measures imposed by WTO Members to prevent serious and irreversible harm should be regarded as being in conformity with GATT disciplines, unless proven otherwise. Particularly in this case, there Article XX(b) should have been less relevant as the decision hinges upon the special nature of the substance itself. If the principle were used as a guide to interpretation in the *Asbestos* Panel Report toxicity would probably have been considered relevant to product likeness, so no discrimination could be found. The Panel did not recognise that risk and toxicity need to be considered at two different stages of analysis, and as such, did not deem asbestos to be a 'like product' of the substitutes, in the first instance.

### 3.2 Article XX GATT 1994: Except the 'Reasonable Public Health Official'

The panel's analysis of the French decree in light of GATT Article XX(b) was the first time that a measure had been found to be exempt from WTO disciplines on public health grounds. The panel found that it was incumbent on the EC, as the party claiming the exception, to justify the invocation of the exception. This is a *prima facie* allocation of the burden of proof that is consistent with all cases of this nature in WTO law. However, as the ban was chosen in light of scientific uncertainty to avoid the risk of serious or irreversible harm, forcing the EC to bear this burden appears a direct violation of the precautionary principle.[81] Still, a closer look at the case reveals that the principle was not necessarily completely disregarded.

In order to determine whether Article XX(b) applies, the panel must find that the ban (a) falls within the range of policies designed to protect human life or health, and (b) is *necessary* to fulfil the policy objective, in the sense that no less restrictive alternative measure would be sufficiently effective and is reasonably available. There are also requirements under the chapeau of Article XX, which were later met by the measures. In the second part of its decision on Article XX(b), the panel determined

[80] *EC/Asbestos*, Panel Report at para 8.130.

[81] The lack of scientific certainty is not a reason to prevent action, particularly in the case of inherently dangerous products, and the burden should be upon the party seeking to expose the French public to potentially harmful chrysotile asbestos to prove that no harm will occur.

that the ban had been applied reasonably. It stated that the decree did not discriminate between domestic and foreign asbestos in countries where the same conditions prevailed, nor was it applied in an arbitrary or unjustifiable manner. Finally, the panel held that the ban was not a disguised restriction on international trade since it was published and notified, and since in its design, architecture and structure, it was clearly intended for the protection of public health. While the measures should not have been reviewed at this stage, it is positive that the panel found them exempt.

In characterising the measure as protective, the panel first had to establish the existence of a risk. Unlike in the *Thai/Cigarettes* case,[82] though, the parties did *not* agree that chrysotile causes a risk to human health. Indeed, Canada maintained that if properly controlled, asbestos was no more harmful than the substitutes. In order to determine whether there was sufficient scientific evidence to conclude that such a risk existed, the panel adopted a *tacit* precautionary approach. The standard applied in the application of GATT Article XX(b) to the French decree was, at each point, that of a fictive 'decision-maker responsible for taking public health measures',[83] not simply the WTO Member.

In determining necessity, the panel stated that it was 'not for the party invoking Article XX to prove that the arguments put forward in rebuttal by the complaining party are incorrect until the latter has backed them up with sufficient evidence'.[84] Indeed, the panel rightly rejected an *inverse* precautionary principle argument put forward by Canada, stating that accepting their argument 'would mean waiting until scientific certainty, which is often difficult to achieve, has been established over the whole of a particular field before public health measures could be implemented'.[85] By reasoning in this light, the panel essentially moved toward use of the precautionary principle for dealing with the scientific uncertainty with which it was faced.

### 3.3 WTO Technical Barriers to Trade (TBT) Agreement: Half the Ban was not a Technical Regulation

The panel rejected Canada's claim that the ban on asbestos violated the TBT Agreement, holding that the decree could be separated into two sections, and that the first part of the Decree, a total ban, cannot be called a technical regulation that defines the characteristics of a product. Although the panel found the other half of the Decree, the Exceptions, to fall under the TBT Agreement, it noted that Canada had not claimed a violation by the way in which France administered them and that the exceptions would disappear as and when reliable and effective substitute products were developed.[86] Canada's carefully constructed argument concerning the precautionary principle in the TBT Agreement was extremely innovative. Canada stated that according to the Appellate Body in *Japan/Measures Affecting Agricultural Products*,

[82] In other cases of this nature, such as the *Thailand/Cigarettes* case, where it was argued that import bans on foreign cigarettes were necessary for public health, due in part to carcinogenic additives in the foreign product, the panel accepted that 'smoking constituted a serious risk to human health and that consequently measures . . . fell within the scope of Article XX(b)'. See *Thailand/Restrictions on Importation and Internal Taxes on Cigarettes*, adopted on 22 December 1989.

[83] *EC/Asbestos*, Panel Report at paras 8.193, 8.217.

[84] *EC/Hormones*, Panel Report at para 104.

[85] *EC/Asbestos*, Panel Report at para 8.221.

[86] Ibid, para 8.72.

'the precautionary principle cannot, in itself, justify a violation of any of the obligations of the SPS Agreement. If this is true in the case of the SPS Agreement, it is even more so in the case of the TBT Agreement, which invokes this principle much more vaguely. Nor can the precautionary principle be invoked to justify the attainment of a zero risk'.[87] Given that the TBT Agreement cites the precautionary principle much more vaguely in its text, the precautionary principle has to be used, contrary to Canada's claim, in a stronger sense as a rule of interpretation.[88] As WTO Members have more discretion in applying TBT obligations, it should be easier for a Member to invoke the precautionary principle.

In addition, apart from the general disciplines, the precautionary principle as included in SPS Article 5(7) allows only the adoption of provisional measures. However, in the *Asbestos* case the prohibition of a dangerous substance is not meant to be temporary. Precautionary measures can be invoked with an element approaching permanency when addressing more serious risks of irreversible harm, if they are meant to encourage the development of safer alternative technologies, for example. While Canada's TBT 'reverse precautionary' argument could not convince, many aspects of interpretation were left unclear by the panel's reasoning, and this was to become a major point on appeal.

## 4. The WTO AB Report on the *Asbestos* Case

### 4.1 WTO Technical Barriers to Trade (TBT) Agreement: The Whole Ban is a Technical Regulation

Canada was successful in its request that the Appellate Body reverse the panel's conclusion that the WTO TBT Agreement did not apply to the French decree. However, while the Body decided that the regulation was indeed a 'technical regulation' under the TBT Agreement, it cautioned that the finding applied only to 'this particular measure and did not mean that all internal measures under GATT Article III.4 fell under the scope of the TBT Agreement. It also did not examine the specific TBT violations alleged by Canada (Articles 2(1), 2(2), 2(4) and 2(8)). As the original panel had determined that the contested decree was not a technical regulation, the Appellate Body found no 'issues of law' or 'legal interpretations' to review regarding them. It also noted that the meaning of the different obligations in the TBT Agreement had not previously been the subject of any interpretation or application by either panels or itself, and that the reach of the TBT Agreement's provisions had 'yet to be determined'. These remarks seem to point the way to an inevitable future clarification of the scope of the TBT Agreement, particularly with regard to the obligations of central government bodies contained in Article 2(6). Canada clearly sought to use these provisions to bolster its case against the 'excessively trade-restrictive' nature of the French asbestos ban. In contrast, sustainable development advocates hold that the inclusion of human health and the environment in the Agreement's legitimate policy objectives justifies a bolder application of the precautionary

[87] Ibid, para 3.311.
[88] WTO SPS Agreement.

principle in the treaty's interpretation, and could even be used to defend trade measures based on production and processing methods. The Appellate Body's ruling in the asbestos case has little bearing on such matters, nor does it change the substantive outcome of the dispute: while it found that the French decree constituted a technical regulation, it reserves its judgment on the TBT Agreement's since it felt there were insufficient 'facts on record'. Furthermore, the Appellate Body noted that the TBT Agreement applied solely to 'a limited class of measures' for which it 'imposes obligations on Members that seem to be different from, and additional to', the obligations imposed on Members under the GATT 1994.

### 4.2 Article III GATT 1994: Health Risk is Part of a Balanced Like-Product Analysis

From a sustainable development point of view, the Appellate Body's most significant finding was to reverse the panel's conclusion that chrysotile asbestos and its substitutes were like products. It concurred with the EC that health risk constituted a legitimate factor in determining whether products were 'like' and thus subject to the GATT Article III.4 obligation to be treated without discrimination,[89] and then stated:

> We are very much of the view that evidence relating to the health risks associated with a product may be pertinent in an examination of 'likeness' under Article III:4 of the GATT 1994.

It further pointed out that the health risk could be evaluated as part of the physical characteristics of the product, noting:

> This carcinogenicity, or toxicity, constitutes, as we see it, a defining aspect of the physical properties of chrysotile asbestos fibres. The evidence indicates that PCG fibres, in contrast, do not share these properties, at least to the same extent. We do not see how this highly significant physical difference cannot be a consideration in examining the physical properties of a product as part of a determination of 'likeness' under Article III:4 of the GATT 1994.

The Appellate Body also noted that all criteria needed to be taken into account in balanced way. Rejecting the panel's exclusively market access-oriented approach to a 'likeness' determination, it wrote:

> We consider this to be especially so in cases where the evidence relating to properties establishes that the products at issue are physically quite different. In such cases, in order to overcome this indication that products are not 'like', a higher burden is placed on complaining Members to establish that, despite the pronounced physical differences, there is a competitive relationship between the products such that all of the evidence, taken together, demonstrates that the products are 'like' under Article III:4 of the GATT 1994. In this case, where it is clear that the fibres have very different properties, in particular, because chrysotile is a known carcinogen, a very heavy burden is placed on Canada to show [ . . . ] that the chrysotile asbestos and PCG fibres are in such a competitive relationship.

After a brief but complete examination of the criteria to take into account in a 'like product' analysis, the Appellate Body:

— reversed the panel's findings that chrysotile asbestos fibres and PCG fibres were 'like products under Article III:4 of the GATT 1994;

[89] For a comparative analysis of the Article III:4 determination, see supra, n 59 at 165.

— found that Canada had not satisfied its burden of proving that these fibres were 'like products' under that provision; and reversed, in consequence, the panel's finding, in paragraph 8.159 of the Panel Report, that the measure was inconsistent with Article III:4 of the GATT 1994.

In this case, the EC was clearly legitimately concerned as to health risks associated with the use of a known carcinogen, and the Decree was consistent with other policy measures that had been taken over the years to reduce risk.[90] These findings are significant, as the differentiation between otherwise similar hazardous and non-hazardous products shifts the burden of proof from the Member who restricts market access on health grounds to the Member who challenges the restriction. If a panel determines that competing products are not 'like' because of a significant difference in the risk they entail, the Article III.4 requirement to grant them equal market access no longer applies. This leaves it to the plaintiff to prove that the alleged health risk does not in fact exist, and that the contested measure should not be exempt from the GATT's general obligations. In this regard the Appellate Body's decision can be seen as inspired by precaution.[91]

### 4.3 Article XX GATT 1994: Except the 'Reasonable Public Health Official'

In its appeal, Canada tried to make such a case: it disagreed with the panel's conclusion that the manipulation of chrysotile asbestos cement products posed a risk to human health and thus fell under the scope of Article XX(b), which allows Members to take measures to protect human health even if those measures are inconsistent with other GATT provisions. The Appellate Body wrote that it saw 'Canada's appeal on this point, as, in reality, a challenge to the panel's assessment of the credibility and weight to be ascribed to the scientific evidence before it'. It further noted that all four scientists consulted by the panel concurred that a health risk did exist and that the carcinogenic nature of chrysotile asbestos fibres had been acknowledged since 1977 by international bodies, such as the International Agency for Research on Cancer and the World Health Organisation. The Appellate Body thus found the panel 'well within the bounds of its discretion in finding that chrysotile-cement products pose a risk to human life and health' and upheld the conclusion that the import ban was a measure to protect human life or health within the meaning of Article XX(b) or the GATT 1994.

To qualify for an exemption under Article XX(b), measures must not only be designed to protect human, animal and plant health, they must also be 'necessary'

[90] Council Directive 67/548/EEC [27.6.67] on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances OJ 196 [1967] p 1 (as amended, classified all types of asbestos as category I carcinogens); Council Directive 76/769/EEC [27.7.67] on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations OJ L 262 [1976] p 201 (as amended, recognised that asbestos and certain products can cause cancer and asbestosis, prohibited the marketing and sale of certain forms of asbestos); Council Directive 87/217/EEC [19.3.87] on the prevention and reduction of environmental pollution by asbestos OJL 85 [1987] pp. 40–5 (as amended, introduced controls on wastes containing asbestos); Council Directive 91/689/EEC [12.12.91] on hazardous waste OJ L 377 [1991] pp. 20–7 (as amended, lists asbestos as hazardous waste). This replaced Council Directive 78/319/EEC [20.3.78] on toxic and dangerous waste OJ L 84 [1978] p 43 (which introduced measures to prevent and reduce environmental pollution, including control on wastes containing asbestos).

[91] Supra, n 7.

in the sense that no less restrictive alternative is sufficiently effective or reasonable available. Canada argued that 'controlled use' was available was a less trade-restrictive alternative. The Appellate Body took a different view:

> In this case, the objective pursued by the measure is the preservation of human life and health through the elimination, or reduction, of the well-known, and life-threatening, health risks posed by asbestos fibres. The value pursued is both vital and important in the highest degree. The remaining question, then, is whether there is an alternative measure that would achieve the same end and that is less restrictive of trade than a prohibition.
>
> Canada asserts that 'controlled use' represents a 'reasonably available' measure that would serve the same end. The issue is, thus, whether France could reasonably be expected to employ 'controlled use' practices to achieve its chosen level of health protection—a halt in the spread of asbestos-related health risks.
>
> In our view, France could not reasonably be expected to employ any alternative measure if that measure would involve a continuation of the very risk that the Decree seeks to 'halt'. Such an alternative measure would, in effect, prevent France from achieving its chosen level of health protection.

The Appellate Body thus upheld the panel's conclusion that the EC had demonstrated a *prima facie* case that there was no 'reasonably available alternative' to the French prohibition, and that the regulation was 'necessary to protect human . . . life or health' within the meaning of Article XX(b) of the GATT 1994. The Body was correct to uphold the Decree as justified under Article XX(b) as a measure to protect human health and life. The panel had sought to introduce a series of tests that would require a regulator to demonstrate it had 'sufficient scientific evidence' to 'reasonably conclude' that it had met each step of an Article XX(b) analysis. In doing so, the Panel had transformed a simple threshold test concerning the measure's policy objective into a scientific risk assessment for which there is no basis in the text of Article XX. The Panel's recurring inquiry into the sufficiency of scientific evidence in the context of a dispute implied too great a burden on the regulator. As mentioned above, science is not always the sole arbiter of objective, non-discriminatory policy making. The precautionary principle, which should inform the interpretation of this and other aspects of WTO Agreements, entitled regulators to act with precaution without having to meet a set threshold of scientific certainty. Scientific evidence of risk (not harm) is relevant to the question of whether a measure is 'necessary' but need not be considered for the initial determination whether the measure falls within the category of measures covered under Article XX(b). A clear confirmation that the precautionary principle entitles regulators to act with precaution without being forced to meet a set threshold of scientific certainty would also have been helpful. However, by maintaining that health risk, rather than certainty of consequences, was at issue, the Appellate Body took a position that contains an element of precaution. Under Article III:4, the complaining party—Canada—must demonstrate that health risks are not a legitimate basis for treating chrysotile differently from alternative materials. Canada would have to show that health risk does not impact on end-uses in the French market, on consumers taste and habits, and that it does not make chrysotile's properties, quality and nature different from the alternatives. By placing the burden of proof on Canada to demonstrate that toxicity is not a basis for distinguishing between the carcinogen and its substitutes, the Appellate Body implicitly took the precautionary principle into account. The alternative, to depend only upon

an exemption analysis under Article XX(b), would have placed the burden on the EC to justify their measure.

## 5. Implications of the *Asbestos* Case

Expectations that the WTO will take sustainable development concerns into account have only increased in the years since the *Hormones* case. While there is no *stare decisis*, WTO law can and does develop incrementally through the findings of the dispute settlement mechanism.[92] The WTO Appellate Body was presented with a unique opportunity to make sustainable development and trade liberalisation objectives more mutually supportive, and they appear to have risen to the challenge in three particular ways.

### 5.1 Risk as an Aspect of Physical Properties in Product 'Likeness'

From an international sustainable development law perspective, it was essential that the Appellate Body recognised that the toxicity of chrysotile asbestos is an objective and legitimate basis for a regulator and a consumer to distinguish between products pursuant to Article III:4 of the GATT 1994. Health risk such as carcinogenicity is relevant to Article III:4, and does not violate the purpose of avoiding protectionism. It provides an objective non-protectionist basis for distinguishing one product from another, one which takes precaution into account. The first panel erred by failing to acknowledge chrysotile asbestos' carcinogenic character in its assessment of a products properties, nature and quality, its end-uses in a given market and consumers tastes and habits in the absence of the Decree, and in its selective consideration of tariff classifications. By examining each of these typical 'like-product' distinctions, actual differences are revealed between chrysotile and other so-called alternative products. Combined with the health risks of chrysotile, the typical 'like-product' criteria demonstrated differences between chrysotile and substitutes. Without naming it, this approach implicitly took a key element of the precautionary principle, as described above, into account, by ensuring that Canada bore the burden of proving that health risk did not distinguish chrysotile from the substitute products.[93] By considering health risks under Article III:4, the Appellate Body allowed the EC to avoid being prematurely required to justify the measure under Article XX(b),[94] leaving the burden of proof on the proponent of the potentially hazardous exports.

[92] Supra, n 78 at 14–15. The Appellate Body emphasised that 'the legal history and experience under the GATT 1947' could be brought into the new WTO. Adopted panel reports were found to be 'an important part of the GATT *acquis*', created legitimate expectations among WTO Members and should thus be taken into account when they are relevant to any dispute.

[93] The complaining party bears the burden of proving discrimination between łlike products; under Article III:4. *See Indonesia/Certain Measures Affective the Automobile Industry*, Report of the Panel WT/DS54/R; WT/DS55/R; WT/DS64/R [23.7.98] para 14.169.

[94] The party claiming the benefit of the exception bears the burden of proving that the requirements of Article XX have been satisfied in *United States/Measures Affecting Imports of Woven Wool Shirts and Blouses*, AB Report WT/DS33/AB/R [23.5.97] at 10–11; Supra, n 69 at 14–15. The burden with respect to the introductory clauses is heavier than that which is required with respect to provisional justification under subpara (b). See *United States/Section 337 of the Tariff Act of 1930*, Panel Report BISD 36S/345 [7.11.89] para 5.27.

### 5.2 Lower Hurdles for Health in Developing Countries

In addition, though this particular dispute is between Canada and the European Communities, developing countries are directly implicated. As health and environment regulatory frameworks are modernised, often in a regional context, developing countries will increasingly find themselves in situations similar to those of France and the European Communities. While developing countries can be exporters, they are often in the position of receiving inherently hazardous goods for sale or processing. In terms of asbestos, designated a carcinogen by the World Health Organisation since 1977, top chrysotile consumers include China, Brazil, Thailand, India, Indonesia, Mexico, Colombia and other developing countries. Should any of these nations choose to follow the lead of France, Germany, Italy and others to ban asbestos, they could face a similar challenge in the WTO. For example, Chile has just banned asbestos, in spite of pressure from developed country exporters. Developing countries could also be in this position *vis-à-vis* other hazardous products, including those domestically prohibited in a producing country and not yet regulated in the developing country, or those covered by multilateral environmental accords to which particular WTO Members are not Parties.

If a WTO Panel were to discount precautionary analysis, the *prima facie* burden of proof risks proving onerous, especially in countries where few resources are available for public health studies and other scientific data. Indeed, the legal test of whether a public health measure is 'necessary', as developed in the *US/Shrimp*[95] case, the Panel affirmed that 'it is important to assess whether consistent or less inconsistent measures are reasonably available'. But in the *EC/Asbestos* case, it went on to state that:

> the existence of a reasonably available measure must be assessed in the light of the economic and administrative realities facing the Member concerned but also by taking into account the fact that the State must provide itself with the means of implementing its policies.[96]

Thus, the Panel considered that it is legitimate to expect a country such as France, with advanced labour legislation and specialised administration services, to deploy administrative resources proportionate to its public health objectives and to be prepared to incur the necessary expenditure. In particular, the Panel also recognised that:

> it is important to assess whether consistent or less inconsistent measures are reasonably available in the light of the economic and administrative realities facing the Member concerned . . .

By being willing to consider the economic and administrative limitations of Members, the Panel seems to have explicitly recognised the differentiated capabilities, a key element of the precautionary principle.[97] Their policy challenges would be taken into account. Reminiscent of earlier WTO debates on 'margins of appreciation', this confirmed deference to the judgment of domestic policy-makers, particularly those faced with constraints. It followed on recognitions of conditions in one earlier case, the *United States/Gasoline* report, but offered a clearly recognition of challenges and realit-

[95] Supra, n 71.
[96] EC/Asbestos, Panel Report at para 8.207.
[97] L.B. de Chazournes, 'Le principe de precaution: Nature, contenu et limites' in *Le Principe de precaution* (Paris: Pedone IHEI–II, forthcoming 2002).

ies faced even by countries attempting to fulfil legitimate public policy objectives.[98] The Appellate Body did not overturn this part of the reasoning.

As such, the *Asbestos* case could be interpreted later to grant a lower 'hurdle' for developing countries exemptions on health and potentially environment or other public interest measures affecting trade.

### 5.3 Procedural Elements

Sustainable development has an important procedural element. Three small procedural steps towards cooperation with other regimes generated initial hope for future openness and policy coordination in WTO disputes.

First, due to the scientific and technical problems in the *Asbestos* case, the panel decided to consult with individual scientific experts[99] and established an eleven-step procedure. The EC requested the Panel to consult a technical expert group but the Panel decided that individual experts were more appropriate.[100] It is worth noting that international organisations and institutions such as the World Health Organisation (WHO), the International Labour Organisation (ILO), the International Programme on Chemical Safety (IPCS), the International Agency for Research on Cancer (IARC) and the International Organisation for Standardisation (ISO) helped the Panel, besides the parties, to identify the experts. The consultation process was non-controversial. The authority of the General Council to consult and cooperate with non-governmental organisations under Article V:2 of the WTO Agreement is not an exclusive authority. It is also within the authority of panels and the Appellate Body to consider and solicit submissions and information from non-parties, including non-government organisations. In particular, the Appellate Body has stated that 'as long as [they] act consistently with the provisions of the DSU and the covered agreements, [they] have the authority to decide whether or not to accept and consider any information that [they] believe is pertinent and useful in an appeal'.[101] The decision of the Panel in this case is nonetheless a very small step towards coherence and cooperation with other regimes, an essential element of procedural sustainability. It generates hope for openness and policy coordination in future WTO disputes.

Second, the Appellate Body issued an Additional Working Procedure for the *EC/Asbestos* case to accept *amicus curiae* briefs,[102] whereby 'any person, whether natural or legal, other than a party or a third party to this dispute, wishing to file a written brief with the Appellate Body' was required to apply to do so upon a specific deadline. The application had to contain information about the applicant, the special interest in the dispute, and the specific issues of law. The decision to publish the criteria was made 'in the interest of fairness and orderly procedure in the conduct of this appeal', the Appellate Body wrote in a communication that accompanied the decision.[103] The Appellate Body decided to establish the 'Additional Procedure' (AP) because it had

[98] Supra, n 69 at para 6.20.
[99] EC/Asbestos, Panel Report at para. 5.1.
[100] Ibid, para. 5.19.
[101] Supra, n 71 at para 106–7. *United States/Imposition of Countervailing Duties on Certain Hot-Rolled Lead and Bismuth Carbon Steel Products Originating in the United Kingdom*, AB Report WT/DS138/AB/R 7 June AB-2000–11 [8.11.00] at para 39.
[102] *Communication from the Appellate Body*, WT/DS135/9 [8.11.00].
[103] WT/DS 135/9.

already received 13 spontaneous submissions, many from developing country industry associations, and expected to receive more in a case closely watched by public interest groups. The Appellate Body reviewed the applications and had the discretion to invite certain organisations to submit *amicus curiae* briefs. The almost revolutionary aspect of this procedure is that independent *amicus* briefs, those which were not included the submissions of a Party or a third party, are almost never taken into account.[104] While the Appellate Body had the authority to accept and consider *amicus* briefs where it was 'pertinent and useful' to do so,[105] non-state actors had never been offered a formal procedure to be taken into account before. This potentially opened an avenue for under-resourced developing country civil society groups to participate, too, and indeed, many of the requests to file were submitted by organisations in developing countries. Thirteen written submissions were received from non-governmental organisations before the AP was established, including submissions from groups in Swaziland, Sri Lanka, Korea, El Salvador, Senegal, Japan, Colombia and other countries.[106] However, certain WTO Members immediately demanded a special General Council meeting to discuss concerns that the Appellate Body might not have acted in consistency with WTO law. Submissions that were received prior to the adoption of the application process were returned to senders with a letter informing them of the new procedure. According to the Appellate Body Report, Canada and the EC not only consented to the AP, but wrote to request copies of all applications filed. Pursuant to the AP, the Appellate Body received 17 application requesting leave to appeal, six of which were received after the deadline and hence resulted in denial. The 11 applications which arrived within time limits were 'carefully reviewed and considered', then leave was denied to all of them. In spite of the denial, a written brief was submitted by FIELD, on its behalf and on behalf of Ban Asbestos Network, Greenpeace International, International Ban Asbestos Secretariat and WWF. The brief was not accepted.[107] According to ICTSD *Bridges*,[108] shaken by the outrage expressed by certain members of the WTO (for whom treatment of *amicus* briefs is among the most controversial aspects of external transparency), the Appellate Body members and the WTO secretariat then refused to answer any questions on the AP, and organisations which used the AP to request leave to file written briefs were turned down with tersely-worded letters. However, under the DSU, the Appellate Body may, in consultation with the chair of the DSB and the Director General, develop working procedures for individual cases.[109] It is therefore simply consistent and no violation of WTO rules to establish a procedure, particularly in a case which has attracted

[104] It should be noted that, relying in part on conclusions of the Appellate Body, a North American Free Trade Agreement tribunal has recognised that there is legitimate public interest arising out of certain subject matter. The tribunal also found that its dispute settlement mechanism 'could benefit from being perceived as more open or transparent; or conversely be harmed if seen as unduly secretive'. See In the Matter of an Arbitration under Chapter 11 of the North American Free Trade Agreement and the UNCITRAL Arbitration Rules, *Methanex Corp v USA*, Decision of the Tribunal on Petitions from Third Persons to Intervene as 'Amicus Curiae' [15.1.01] para 49, available at http://www.iisd.org/investment_regime.htm

[105] See *United States/Imposition of Countervailing Duties*, supra n 101 at para 39.

[106] *EC/Measures Affecting Asbestos and Asbestos-Containing Products* WT/DS135/AB/R [12.3.01] para 53.

[107] Ibid, paras. 54–7.

[108] '*Amicus* Brief Storm Highlights WTO's Unease with External Transparency', *Bridges Between Trade and Sustainable Development* (Geneva: ICTSD, 2000) Year 4(9).

[109] Working Procedures for Appellate Review WT/AB/WP/3 [28.2.97], drawn up pursuant to Article 17(9) of the *Understanding on Rules and Procedures Governing the Settlement of Disputes*.

strong public interest. Unfortunately, a restrictive procedure and tight deadlines limited the effectiveness of this step, and the reaction of members (in spite of the prior written consent of the Parties to the dispute), blunted the attempt. This was unfortunate. Due process has been recognised by the Appellate Body as applying to panels' procedures and as being implicit in certain provisions of the GATT 1994.[110] Indeed, the Appellate Body has expressly noted that a party to a WTO appeal is 'always entitled to its full measures of due process' and that WTO Members themselves are bound to administer domestic procedures in accordance with standards of basic fairness and due process.[111] This consistent respect for fairness and due process should extend not only to parties to the dispute but to any person engaged in the dispute settlement process, including persons invited to apply for leave to submit a written submission in accordance with a new procedure. At a minimum, the Appellate Body should have given reasons for not granting the requested leave to appeal.

Third, for the first time in GATT/WTO law, a member of the Appellate Body broke ranks to make a 'concurring' statement regarding ethical considerations in the case at issue. At paragraph 149 of the *EC/Asbestos* Appellate Body report, it states:

> One Member of the Division hearing this appeal wishes to make a concurring statement.

The Member goes on to state:

> The Panel . . . ruled that it '[has] sufficient evidence that there is in fact a serious carcinogenic risk associated with the inhalation of chrysotile fibres' (emphasis added). In fact, the scientific evidence of record for this finding of carcinogenicity of chrysotile asbestos fibres is so clear, voluminous, and is confirmed, a number of times, by a variety of international organisations, as to be practically overwhelming . . . It is difficult for me to imagine what evidence relating to economic competitive relationships as reflected in end-uses and consumers' tastes and habits could outweigh and set at naught the undisputed deadly nature of chrysotile asbestos fibres, compared with PCG fibres, when inhaled by humans, and thereby compel a characterisation of 'likeness' . . .

The Member then concludes with a second point that:

> in future concrete contexts, the line between a 'fundamentally' and 'exclusively' economic view of 'like products' under Article III:4 may well prove very difficult, as a practical matter, to identify. It seems to me the better part of valour to reserve one's opinion on such an important, indeed, philosophical matter, which may have unforeseeable implications . . .

These statements are significant in a substantive and a procedural way. In substance, the Member in question is stating first that in this particular case, to him, carcinogenicity is a valid reason in itself to find that the fibres in question are not 'like' the non-carcinogenic alternatives. The Member is also stating that he has substantial doubts about the necessity or appropriateness of adopting a fundamentally economic interpretation of product likeness—he thinks that other questions may sometimes be more relevant and that as such, it will become less possible to stick to commercial

[110] *EC/Regime for the Importation, Sale and Distribution of Bananas*, AB Report WT/DS27/AB/R [25.9.97] para 144; *India/Patent Protection for Pharmaceutical and Agricultural Chemical Products*, AB Report WT/DS50/AB/R [16.1.98] para 95; *Argentina/Certain Measures Affecting Imports of Footwear, Textiles, Apparel and Other Items*, AB Report WT/DS56/AB/R [20.3.97] para 79; *Brazil/Measures Affecting Desiccated Coconut*, AB Report WT/DS22/AB/R [20.3.97] p 15. For measures implicit, see *United States/Restrictions on Imports of Cotton and Man-Made Fibre Underwear*, AB Report WT/DS24//AB/R [25.2.97] p 10.

[111] Supra, n 71 at paras 97 and 181.

criteria only with a clear conscience. These statements recognise, fundamentally, the manner in which WTO law is increasingly affecting, and being affected by, non-traditional concerns. In terms of the process—this is nothing short of bizarre. The Member, with the support of his fellow Division Members, is breaking ranks to express concern as to the way that the Appellate Body can take into account 'philosophical' non-economic views. This step seems to indicate an increasing flexibility for dissenting views in the Appellate Body mechanism. It could mean a movement toward a more 'rules-based' or even 'principles-based' international trading regime, allowing more comprehensive judgments which encompass richer consideration of the plurality of the issues.

## 6. Conclusion

What are the implications of the *EC/Asbestos* case for the development of international sustainable development law in the WTO, and how can the precautionary principle be taken into account more explicitly by WTO dispute settlement processes?

Expectations that the WTO will take sustainable development concerns into account have only increased in the three years since the Hormones case. While there is no *stare decisis*, WTO law can and does develop incrementally through the findings of the dispute settlement mechanism. In this case, the Appellate Body emphasised that 'the legal history and experience under the GATT 1947' could be brought into the new WTO. Adopted Panel reports were found to be 'an important part of the GATT *acquis*', created legitimate expectations among WTO Members and should thus be taken into account when they are relevant to any dispute.[112]

In reviewing the Panel decision on *Asbestos*, the WTO Appellate Body was presented with a unique opportunity to make sustainable development and trade liberalisation objectives more mutually supportive, and they appear to have risen to the challenge. In the initial Asbestos Panel report, the definition of 'like products' in GATT Article III was interpreted very broadly, while GATT Article XX(b) was given an extremely restrictive interpretation. Even with these restrictions, and in spite of the fact that no other public health, environment or cultural policy measure had ever passed the strict GATT 1994 Article XX legal test, the French decree was deemed exempt from WTO disciplines. While the Panel was to be congratulated for many aspects of its procedural and substantive attempts at balancing the trade liberalisation and sustainable development objectives of the WTO, questions remained as to the long-term consequences of its decision, particularly in light of the discretionary aspects of the determination not to take carcinogenic properties into account when determining a like product, and in its refusal to be clear about a tacit precautionary interpretation of Article XX(b). The willingness of the Appellate Body to clearly reject and reverse this reasoning has only further supported the sustainable development implications of this landmark case.

The precautionary element of sustainable development is more than a mechanism for environmental policy makers. It is a guiding principle and a manner to ensure that balanced decisions can be made at all levels, and in all bodies of law, when there

[112] See *Japan/Taxes on Alcoholic Beverages* WT/DS8; DS10DS11/AB/R [1.11.96] pp 14–15.

is scientific uncertainly and a threat of serious or irreversible harm. The potential deaths of over 22,900 DIY enthusiasts and builders constitute such an irreversible harm. It is estimated that in France the total number of deaths by mesothelioma over the whole of the period of 1996–2020 will be 20,000 for men and 2,900 for women.[113] Fortunately, it can be found that precaution was, in the end, used implicitly as a guide to interpretation in the *Asbestos* case, toxicity was considered relevant to the determination of product likeness, and no discrimination was found.

The Panel and the Appellate Body also deserve recognition for the steps they have taken to ensure increasingly healthy decision-making at the WTO.[114] The Appellate Body took several excellent opportunities to put preventive measures in place, and even find aspects of a cure for these ongoing policy conflicts. Their decision in this case may prove to have been crucial in ensuring that international trade law fosters and does not frustrate the sustainable development of public health and environment law.

[113] See A.G.S. Ilg *et al*, *Estimation of the Past and Future Burden of Mortality from Mesothelioma in France*, Occupational Environmental Medicine, 1998; 55:760–5, mentioned at para 3.320 of the *EC – Asbestos* Panel report.

[114] R.M. Fernández Egea, El asunto Amianto: Por fin una decisión saludable, Revista Electrónica de Estudios Internacionales, online: REEI <www.reei.org>.