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## VI.43 The precautionary principle in WTO law

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### **Abstract**

The WTO dispute settlement bodies declined to rule on the status of the precautionary principle. However, with respect to the Sanitary and Phytosanitary Agreement (SPS), in several cases the Appellate Body has given implicit indications that a precautionary approach could underpin some SPS obligations. Whether the lessons to be drawn from this complex case law can be applied to genuine environmental issues remains to be seen.

### **Keywords**

WTO law, sanitary and phytosanitary measures, precautionary principle, risk assessment, risk management, level of protection

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### **VI.43.1 Introduction: background and context**

Before 1991, the environment-trade debate was primarily an arcane speciality that attracted little attention within the legal community. In endeavouring to encourage 'the full use of the resources of the world',<sup>1</sup> the GATT 1947 system paid very little attention indeed to environmental concerns; consequently, trade policy and environmental policy evolved along separate paths for several decades.

Despite the change of tone in 1994 in the wording of the WTO's aims – 'an optimal use of the world's resources in accordance with the objective of sustainable development'<sup>2</sup> – the fun-

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<sup>1</sup> Preamble to the 1947 General Agreement on Tariffs and Trade (GATT) 55 UNTS 194.

<sup>2</sup> Preamble to the 1994 Agreement Establishing the World Trade Organization (WTO Agreement), 1867 UNTS 154. As noted by the WTO Appellate Body, this change in orientation must 'add colour, texture and shading to the interpretation of the agreements annexed to the WTO Agreement' (*Shrimp*, para. 153). The Doha WTO Ministerial Declaration of 14 November 2001 strongly reaffirms the commitment to the objective of sustainable development, as stated in the Preamble to the Marrakesh Agreement: 'We are convinced that the aims of upholding and safeguarding an open and non-discriminatory multilateral trading system, and acting for the protection of the environment and the promotion of sustainable development can and must be mutually supportive. . . . We recognize that under WTO rules no country should be prevented from taking measures for the protection of human, animal or plant life or health, or of the environ-

damental principles of GATT remain unaltered;<sup>3</sup> environmental concerns are still considered the black sheep of the trading community. Indeed, under both the GATT Agreement and the TBT Agreement, environmental concerns are likely to justify derogations to the obligations encapsulated in these treaties, derogations that should be interpreted narrowly.<sup>4</sup> Moreover, the Members implementing these more trade-restrictive measures are called on to comply with a necessity test. Principle 12 of the Rio Declaration on Environment and Development, which states that ‘Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade’, in its own way also recognizes the primacy of free trade over environmental interests. Furthermore, Principle 12 clearly discourages unilateral action to deal with environmental challenges outside the jurisdictions of importing countries; transboundary or global issues should be based, as far as possible, on international consensus.

As a result, trade restrictions to achieve environmental goals have given rise to an increasing number of international trade disputes during the two past decades; the ‘trade-environment’ relationship has thus become one of the hottest topics in a number of political circles.

The precautionary principle (PP) is not mentioned explicitly in any of the constitutive agreements of the WTO,<sup>5</sup> although recourse to the principle has been somewhat unsatisfactorily addressed on a case-by-case basis by the WTO Dispute Settlement Bodies (DSBs).<sup>6</sup> It comes thus as no surprise that authors have been crossing swords as to whether WTO law allows or accommodates Members to enact precautionary measures. The aim of this chapter is to shed light on these controversies. Given that the PP came into the forefront in cases regarding the Sanitary and Phytosanitary Agreement (SPS Agreement), the first section of the chapter is concerned with the manner in which a precautionary approach has been taken into consideration so far in this context. The second section examines whether the GATT Agreement could justify measures implementing the PP.

## **VI.43.2 The SPS Agreement**

### *VI.43.2.1 Dispute Settlement Bodies’ case law*

WTO DSBs have already tackled the PP in a number of cases concerning health measures. These cases are of interest to environmental lawyers as the public health issues that they raise concerning the nature of risk assessment (RA) may be similar to issues that arise in environmental cases regarding restrictions placed on hazardous substances.

The SPS Agreement elaborates specific rules ‘for the application of Article XX(b)’

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ment at the levels it considers appropriate, subject to the requirement that they are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, and are otherwise in accordance with the provisions of the WTO Agreements’.

<sup>3</sup> Guruswamy (1998) 550–552.

<sup>4</sup> GATT, Article XX; TBT, Article 2.2.

<sup>5</sup> The EC did not manage to obtain the inclusion of the principle in any of the WTO agreements during the 1999 Seattle Ministerial Conference and the 2001 Doha Ministerial Conference of the WTO.

<sup>6</sup> Although not mentioning the principle, the Sanitary and Phytosanitary Measures (SPS) Agreement does decidedly support the application of crucial aspects of the principle.

of the GATT that allows national measures ‘to protect human, animal and plant life or health’.<sup>7</sup> In particular, this agreement strikes a delicate balance between the right of the Members to adopt and to maintain measures ‘necessary to protect human, animal or plant life or health’ and the need to restrict the use of such measures for protectionist purposes. Given that SPS measures must necessarily achieve their goals, less trade restrictive alternatives must be excluded (necessity test).

Under Article 2.2, Members have the right to enact SPS measures inasmuch as they are based upon ‘scientific principles’ and are not maintained without ‘sufficient scientific evidence’. Furthermore, pursuant to Article 2.3, SPS measures may not be chosen arbitrarily or give rise to ‘unjustifiable restriction or disguised restriction on trade’.

In accordance with Article 3.2, WTO Members may choose measures that ‘conform to international standards’ (e.g. Codex Alimentarius). Nonetheless, Article 3.3 allows them to introduce or maintain a distinctively higher level of protection than these international standards, in so far as their measures are:

- scientifically justified; or
- adopted ‘as a consequence of the level of sanitary or phytosanitary protection a Member determines to be appropriate in accordance with the relevant provisions of paragraphs 1 through 8 of Article 5’.

Regarding the scientific justification of the SPS measures, Article 5.1 requires ‘an assessment, as appropriate to the circumstances, of the risks to human, animal or plant life or health, taking into account risk assessment techniques developed by the relevant international organizations’. Moreover, as set out in Article 5.2, ‘[i]n the assessment of risks, Members shall take into account available scientific evidence’.<sup>8</sup> Accordingly, science is regarded as the benchmark of rational policy-making. As discussed below, this reasoning has been endorsed by the DSB that took the view that Article 5.1 has to be interpreted as entailing the performance of an RA.

A number of disputes have arisen in relation to these provisions. In two decisions of 18 August 1997, a WTO Panel determined that identification of the risk posed by hormones in meat was a condition *sine qua non* for the RA required by Article 5. Failing such an identification, the European Community (EC) was not justified in having recourse to the PP to justify its ban on hormones in beef, which was being challenged.<sup>9</sup> According to the Panel, the PP is applicable only in the case of provisional measures under Article 5.7 of the Agreement. The Panel could not have been clearer: any measure that restricts trade

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<sup>7</sup> SPS Agreement, Preamble, last sentence.

<sup>8</sup> Article 5(2) states: ‘In the assessment of risks, Members shall take into account available scientific evidence; relevant processes and production methods; relevant inspection, sampling and testing methods; prevalence of specific diseases or pests; existence of pest- or disease-free areas; relevant ecological and environmental conditions; and quarantine or other treatment’.

<sup>9</sup> *EC Measures Concerning Meat and Meat Products (Hormones)*, Complaint by the United States, OMC WT/DS 26/R/USA of 18 August 1997; *EC Measures Concerning Meat and Meat Products (Hormones)*, Complaint by Canada, OMC WT/DS 48/R/Can of 18 August 1997. For a critical examination of these decisions, see Deimann (1997).

must be based on fully assessed risks and not on the uncertainties inherent in scientific research.<sup>10</sup>

The Appellate Body (AB), for its part, accorded a broader role to the PP, but left open the way in which it should be applied.<sup>11</sup>

Whereas the EC argued that the PP was embedded in international customary law, the AB declined to rule on its status, stating that it was ‘unnecessary, and probably imprudent’ for it to take a position on the legal status of this principle.<sup>12</sup> It nevertheless acknowledged that the PP ‘finds reflection in Article 5.7 of the Agreement’, where it is not expressly recognized.<sup>13</sup> Furthermore, it noted that the principle is reflected in the sixth paragraph of the SPS Agreement’s Preamble and in Article 3.3, both of which recognize the right of Members individually to determine the appropriate level of sanitary protection, even if this is different from the level of protection which would be achieved by measures based on ‘international standards, guidelines or recommendations’.

However, the PP does not by itself, and without a clear textual provision to that effect, relieve a Panel of the duty to apply the normal principles of treaty interpretation. Accordingly, the AB dismissed the Commission’s view that there was no requirement to carry out a formal RA under Articles 5.1 and 5.2. Given that the SPS measures must be supported by scientific evidence, these two paragraphs entail the obligation to perform an RA. In other words, scientific justification requires the performance of an RA. What is more, given that the PP is not incorporated into the SPS Agreement, it could not override the explicit wording of Articles 5.1 and 5.2. Accordingly, the EC had to rely on an RA in order to implement its precautionary measures.<sup>14</sup> The AB consequently held that the EC ban on hormone-treated beef was incompatible with the SPS Agreement.

Regarding the EC request to remove the US retaliatory measures on the grounds that the EC has removed the measures found to be WTO-inconsistent in the *EC-Hormones* case, in 2008 the AB reversed the Panel’s finding that the EC’s import ban relating to oestradiol-17 $\beta$  was not based on an RA as required by Article 5.1 of the SPS Agreement. The EC requested the AB to find that the United States and Canada had breached Article 23.1 of the DSU by continuing the suspension of concessions despite the adoption and subsequent notification to the DSB of the new EC legal act complying with the SPS obligations, however, the AB was unable to complete the analysis and therefore

<sup>10</sup> Ibid, sub. VIII D5 (b)(iii).

<sup>11</sup> Appellate Body Report in *EC-Measures Affecting Meat and Meat Products (Hormones)* (*‘EC-Hormones’*) (WT/DS26&48/AB/R), adopted 13 February 1998 [hereinafter Appellate Body, *EC-Hormones*]. E.g., Douma (1999); Eggers (1998); Hurst (1988); Van der Borgh (1998); Hughes (1998); Goh and Ziegler (1998); Walker (1998); Pauwelyn (1999); Thomas (1999); Noiville (2000) 263.

<sup>12</sup> Concerning the customary value of the principle, see de Sadeleer (2002) 62–67.

<sup>13</sup> Ibid, para. 124.

<sup>14</sup> In the *Hormones* case, the Appellate Body concluded that the RA should have reviewed the carcinogenic potential, not of the relevant hormones in general, but of ‘residues of those hormones found in meat derived from cattle to which the hormones had been administered for growth promotion purposes’ (para. 200). In *Japan – Measures affecting the importation of apples*, the Appellate Body endorsed the same reasoning (para. 199).

made no findings as to the consistency or inconsistency of the import ban relating to oestradiol-17 $\beta$  with Article 5.1.<sup>15</sup>

The second dispute in which the PP was invoked, *Australia-Salmon*, arose from a decision by Australia to ban fresh, chilled or frozen salmon imported from Canada. The Australian measure was based on an RA that, according to the panel, ‘addressed and to some extent evaluated a series of risk reduction factors, in particular, on a disease-by-disease basis’. Referring to its *EC-Hormones* Report, the AB stated in its 20 October 1998 report that in this kind of case an RA must evaluate, among other things, the likelihood of adverse health effects: ‘the ‘risk’ evaluated in a risk assessment must be an ‘ascertainable risk’; theoretical uncertainty is not the kind of risk which, under Article 5.1 of the SPS Agreement, is to be assessed. As a result, it will not be sufficient for governments to impose regulations simply on the basis of the ‘theoretical’ risk that underlies all scientific uncertainty. Hence, a risk in the context of Article 5.1 is more than a mere possibility.<sup>16</sup> This does not mean, however, that a Member cannot determine their own appropriate level of protection to be ‘zero risk’. However, in *Australia-Salmon*, the AB concluded that the import prohibition on salmon was not based on an RA as required by Article 5.1 and that Australia had therefore acted at variance with this provision.<sup>17</sup>

Finally, in a report of 22 February 1999, *Japan-Varietals*, the AB again based its decision on the *EC-Hormones* case to reject direct application of the PP and rule against a Japanese import prohibition that was not based on an RA.<sup>18</sup>

Finally, the Panel report of 29 September 2006 in *EC-Biotech* dismissed the precautionary arguments put forward by the EU authorities regarding the restrictions imposed on the placing on the market of different GMOs.<sup>19</sup>

#### VI.43.2.2 Lessons to be drawn from the DSBs’ case law

The following conclusions can be drawn from the *EC-Hormones*, *Australia-Salmon*, *Japan-Varietals* and *EC-Biotech* cases. The PP can be applied through two different venues:

- where there is sufficient scientific evidence, Members may choose their level of protection, provided that, in accordance with Article 5.1, an RA has been carried out – the measure must have a reasonable relationship with the RA;<sup>20</sup> and
- where there is insufficient scientific evidence, Members can adopt provisional SPS measures in accordance with Article 5.7.

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<sup>15</sup> DS320, United States – Continued Suspension of Obligations in the EC – Hormones Dispute, paras 207–208.

<sup>16</sup> Matsuhita, Schoenbaum and Mavroidis (2004) 495.

<sup>17</sup> Appellate Body Report in *Australia – Measures Affecting the Importation of Salmon*, WT/DS18/AB/R, adopted 6 November 1998 [hereinafter AB, *Australia-Salmon*].

<sup>18</sup> Appellate Body Report in *Japan-Varietals, Japan – Measures Affecting Agricultural Products*, WT/DS76/AB/R, adopted 19 March 1999 [hereinafter AB, *Japan-Varietals*].

<sup>19</sup> DS291, European Communities – Measures Affecting the Approval and Marketing of Biotech Products.

<sup>20</sup> Cheyne (2007).

This calls for a closer analysis of the role that a precautionary approach could play at these two stages.

*VI.43.2.2.1 Recourse to an RA in accordance with Article 5.1* Given that Article 5.1 has been interpreted as requiring the performance of an RA, the Member can be risk averse in so far as their measure is supported by an RA. That begs the question what is an RA? In *EC-Hormones*, the Panel understood the term to mean ‘at least for risks to human life or health, a scientific examination of data and factual studies; it is not a policy exercise involving social value judgments made by political bodies’. The AB took the view that an RA is ‘a process characterized by systematic, disciplined and objective enquiry and analysis’, which must be specific to the facts of the case and examine risk as it applies to ‘the real world where people live and work and die’.<sup>21</sup> According to the Panel that adjudicated the *Biotech* case, an ‘adequate RA’ is one that applies Annex A(4) standards.

Although the SPS Agreement provides little guidance as to the characteristics of an RA, the lessons to be drawn from the above case law provides important lessons which could be transposed to other types of RA procedures, particularly in the field of environmental protection. Those principles will help us to elaborate recommendations for reconceptualizing RA procedures at a later stage.

The manner in which RAs are tailored is subject to several limits.

1. The RA ‘must be sufficiently specific to the risk at issue’.<sup>22</sup>
2. The risk must be ‘ascertainable’ and not ‘theoretical’, since science can never provide absolute certainty that a given substance will never give rise to adverse health effects.<sup>23</sup>
3. RA criteria are ambiguous: on the one hand, the object and purpose of the SPS Agreement justify the examination and evaluation of all such risks for human health whatever their precise and immediate origin; on the other hand, any RA must be sufficiently specific (RAs must be conducted for each substance).<sup>24</sup>

However, Members are endowed with some room for manoeuvre in carrying out their RAs that would allow them to endorse a precautionary approach in addressing lingering scientific uncertainties.

1. There is no obligation to follow any particular methodology for conducting an RA.<sup>25</sup> Given this flexibility, Members are not precluded from organizing their RAs along the lines of the disease or pest at issue. Furthermore, Members are free to consider in their risk analysis multiple agents in relation to one disease.<sup>26</sup>

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<sup>21</sup> AB, *EC-Hormones*, para. 189.

<sup>22</sup> Ibid, para. 199; *Japan-Varietals*, para. 191.

<sup>23</sup> Appellate Body, *EC-Hormones*, para. 186. In the *Australia-Salmon* case, the Appellate Body stated that it will not be sufficient for governments to impose regulations simply on the basis of the ‘theoretical’ risk that underlies all scientific uncertainty (para. 129).

<sup>24</sup> Ibid, para. 206.

<sup>25</sup> AB, *EC-Hormones*, para. 200; *Japan-Varietals*, para. 204.

<sup>26</sup> AB, *Japan – Measures affecting the importation of apples*, WTO Doc. WT/DS245/AB/R (23 November 2003), para. 204.

2. RAs can be conducted either quantitatively or qualitatively.<sup>27</sup> When a Panel is charged with determining whether sufficient scientific evidence exists to warrant a WTO Member maintaining a particular measure, it ‘may of course, and should, bear in mind that responsible, representative governments act from perspectives of prudence and precaution where the risk of irreversible, e.g., life-terminating, damage to human health is concerned’.<sup>28</sup>
3. The risks to be evaluated in an RA under Article 5.1 are not only risks ‘ascertainable in a science laboratory operating under strictly controlled conditions’.<sup>29</sup> What matters is not only risks ascertainable by standard laboratory methods but tangible risks in the ‘real world’ and their ‘actual potential for adverse effects on human health in the real world where people live and work and die’.<sup>30</sup>
4. Other factors listed under Article 5.2 – such as inspections and testing methods – must also be taken into account. Accordingly, relevant processes and production methods may be relevant in an RA.
5. The AB also rejected the inclusion of the word ‘probability’ in the Panel’s interpretation of the definition of RA, considering that it introduced a quantitative dimension of the notion of risk and therefore implied a ‘higher degree or a threshold of potentiality or possibility’, whereas the word ‘potential’ in Annex A(4) of the Agreement only relates to the possibility of an event occurring.<sup>31</sup>
6. Divergent scientific opinions coming from qualified and respected sources can be taken into account by Governments acting responsibly and in good faith. Accordingly, an RA can set out both the prevailing view representing the mainstream of scientific opinion and the opinions of scientists taking a divergent view provided that they are from ‘qualified and respected sources’.<sup>32</sup>
7. There is no requirement for a proper RA to establish a ‘minimum magnitude’ or threshold level of degree of risk.<sup>33</sup> An SPS member’s acceptable level of risk could even be set at ‘zero risk’; hence, an RA indicating a slight degree of risk can serve as a valid basis for State action.
8. *Ratione temporis*, scientific evidence does not have to be provided at the moment the measure is adopted; it can be provided to the WTO DSB when the measure is challenged before a Panel.<sup>34</sup>

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<sup>27</sup> AB, *EC-Hormones*, paras 184–186; *Australia-Salmon*, para. 124.

<sup>28</sup> AB, *EC-Hormones*, para. 194.

<sup>29</sup> *Ibid.*, para. 187.

<sup>30</sup> *Ibid.*, para. 187.

<sup>31</sup> *Ibid.*, paras 183–184.

<sup>32</sup> *Ibid.*, para. 194.

<sup>33</sup> While the Panel required an RA to establish a minimum magnitude of risk, the AB noted that imposition of such a quantitative requirement finds no basis in the SPS Agreement (Appellate Body, *EC-Hormones*, para. 186). This was confirmed in a recent report of the panel (*European Communities – Measures Affecting the Prohibition of Asbestos and Asbestos Products* (WT/DS 135), para. 8.171) and the Appellate Body in the Asbestos case (*European Communities – Measures Affecting the Prohibition of Asbestos and Asbestos Products*, WTO Doc. WT/DS135/AB/R (12 March 2001), para. 167) [hereinafter AB, *EC-Asbestos*].

<sup>34</sup> Matsuhita, Schoenbaum and Mavroidis (2004) 509.

*VI.43.2.2.2 Setting a high level of protection at risk management level* The AB drew a clear distinction between RA, which must be based on a scientific approach, and the political decision (risk management) that determines the level of protection, which may be ‘zero risk’. As a result, once a proper RA has been conducted and in cases where an ‘ascertainable risk’ is detected, WTO Members have the right 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.<sup>35</sup> Moreover, Members are not required to carry out a cost-benefit analysis. Therefore, the WTO Member concerned must make a ‘societal value judgment’ as to whether or not it can accept a given risk. This involves a qualitative decision taking in social and political considerations.

That being said, the results of the RA must sufficiently warrant – that is to say, reasonably support – the SPS measure at stake. Nonetheless, the obligation to ‘base’ the SPS measure on an RA should not be understood to mean that the measure must conform to the RA.<sup>36</sup>

Whether such a rational relationship exists between an SPS measure and scientific evidence is to be determined on a ‘case-by-case basis’ and will depend upon the particular circumstances of a case, including the characteristics of the measure at issue and the quality and quantity of the scientific evidence.<sup>37</sup> Although it is not entirely clear, the AB’s analysis suggests that this ‘rational relationship’ standard is quite easily satisfied.<sup>38</sup> As a result, the WTO member is endowed with some leeway in tailoring its measure.

In *EC-Biotech*, the Panel held that the EC RA did not identify possible uncertainties and did not explain why uncertainties were justifying the measures at issue. Because the safeguard measures were not warranted by the relevant RA, they were found to be inconsistent with Article 5.1.<sup>39</sup>

*VI.43.2.2.3 The impossibility of taking uncertainty into account in provisional SPS measures pursuant to Article 5.7* In cases where it is not possible to conduct a proper RA, Article 5.7 of the SPS Agreement allows Members to adopt and maintain a provisional SPS measure; a provision that according to the AB incorporates the PP. Moreover, Article 5.7 is an autonomous right not an exception in relation to Articles 2.2 and 5.1. This qualification has implications for the allocation of the burden of proof: the complaining party bears the burden of proof that the conditions set forth in that paragraph are not correctly implemented. This shift should facilitate the defence of SPS measures endorsing a precautionary approach.<sup>40</sup>

However, it must be stressed that Article 5.7 does mirror a precautionary approach

<sup>35</sup> AB, *EC-Hormones*, para. 124.

<sup>36</sup> The obligation that an SPS measure may not be maintained without sufficient scientific evidence requires that there be a ‘rational or objective relationship between the SPS measure and the scientific evidence’. AB, *EC-Hormones*, paras 186, 189, 193, 197 and 253.

<sup>37</sup> AB, *EC-Hormones*, para. 195; *Japan-Varietals*, para. 84.

<sup>38</sup> Hurst (1988) 182.

<sup>39</sup> Baumüller and Oliva (2006) 260.

<sup>40</sup> Vecchione (2011) 233.



only to a limited extent,<sup>41</sup> as this safety clause is subject to four requirements, which are not only cumulative but also interpreted narrowly:

1. The 'relevant scientific information' must be insufficient.
2. The measure should be adopted 'on the basis of available pertinent information'.
3. The Member must seek to obtain the 'additional information necessary for a more objective assessment of risk', which must be sought in order to allow the Member to conduct 'a more objective assessment of risk'.<sup>42</sup>
4. The Member is obliged to 'review the . . . measure accordingly within a reasonable period of time'. The requirement of a 'reasonable period of time' must 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 needed for review and the characteristics of the SPS measure.<sup>43</sup>

Whenever one of these four requirements is not met, the measure at issue is inconsistent with Article 5.7 and falls within the scope of Articles 2.2 and 5.7.<sup>44</sup>

The first condition has been giving rise to controversies. What makes scientific evidence insufficient? The AB took the view in *Japan-Varietals* that the application of the safeguard clause enshrined in that provision, 'is triggered not by the existence of scientific uncertainty, but rather by the insufficiency of scientific evidence'.<sup>45</sup>

When a panel reviews a measure claimed by a Member to be provisional, that panel must assess whether 'relevant scientific evidence is insufficient'. This evaluation must be carried out, not in the abstract, but in the light of a particular inquiry. The notions of 'relevance' and 'insufficiency' in the introductory phrase of Article 5.7 imply a relationship between the scientific evidence and something else. . . . 'relevant scientific evidence' will be 'insufficient' within the meaning of Article 5.7 if the body of available scientific evidence does not allow, in quantitative or qualitative terms, the performance of an adequate assessment of risks as required under Article 5.1 and as defined in Annex A to the SPS Agreement. Thus, the question is not whether there is sufficient evidence of a general nature or whether there is sufficient evidence related to a specific aspect of a phytosanitary problem, or a specific risk. The question is whether the relevant evidence, be it 'general' or 'specific', in the Panel's parlance, is sufficient to permit the evaluation of the likelihood of entry, establishment or spread of, in this case, fire blight in Japan.<sup>46</sup>

Given that Article 5.7 provides an exception to the rule that SPS measures may not be introduced without an RA, the inability to perform an RA appears to be the key factor to trigger provisional measures under Article 5.7.

Therefore, if the body of available scientific evidence does not allow, in quantitative or qualitative terms, the performance of an RA, national measures cannot reckon upon

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<sup>41</sup> Douma (1999) 140; Noiville and Gouyon (2000) 306.

<sup>42</sup> AB, *Japan-Varietals*, para. 92.

<sup>43</sup> *Ibid.*, para. 93. The Cartagena Biosafety Protocol does not impose a comparable follow-up obligation for precautionary measures taken under its Articles 10(6) or 11(8).

<sup>44</sup> AB, *Japan-Varietals*, para. 89.

<sup>45</sup> *Ibid.*, para. 184.

<sup>46</sup> *Ibid.*, para. 179.

Article 5.7. On the contrary, under the SPS Agreement, a precautionary measure could not be triggered by genuine scientific uncertainty<sup>47</sup> as is the case in international environmental law. Only insufficient results precluding the achievement of a RA may support such provisional measures.

It follows that the availability of an RA precludes the enactment of provisional measures. In the *EC-Biotech* case, the Panel ruled that the availability of assessments of the risks entailed by several GMOs provided ‘sufficient scientific evidence’, therefore precluding the implementation of Article 5.7.<sup>48</sup> The Panel dismissed the EC’s plea that the concept of ‘insufficiency’ had to be interpreted in relation to national concerns and the chosen level of protection. The Panel considered only the relationship between the scientific evidence and the obligation to perform an RA under Article 5.1.

With regard to the EC Member State safeguard measures, the Panel was not convinced by the need to improve the already existing assessment carried out by the EC scientific committees.

Where a risk assessment has been performed, and that risk assessment meets the standard and definition of . . . [the SPS Agreement], it does not cease to be a risk assessment . . . merely because a particular Member judges that the risks have not been assessed with a sufficient degree of precision.<sup>49</sup>

As a result, the Panel concluded that the safeguard measures were inconsistent with Article 5.7. Given that Article 5.7 was inapplicable, the Panel found that the EC acted inconsistently with its obligations under Articles 5.1 and 2.2 of the SPS Agreement with regard to all of the safeguard measures at issue, because these measures were not based on RAs satisfying the definition of the SPS Agreement and hence could be presumed to be maintained without sufficient scientific evidence.

Regarding the EC request to remove the US retaliatory measures on the grounds that the EC has removed the measures found to be WTO-inconsistent in the *EC-Hormones* case, the PP was invoked in order to justify a temporary ban of five specific hormones.<sup>50</sup> The AB reversed the Panel’s finding that the provisional import ban did not meet the requirements of Article 5.7 of the SPS Agreement; however, the AB was unable to determine whether the RA performed by the EC supported a case of insufficient scientific evidence.<sup>51</sup>

Such interpretation does not meet with unanimous approval. As stressed by Vecchione, even the performance of an RA does not provide any guarantee of removing all lingering uncertainties.<sup>52</sup> Indeed, experts can take years to carry out their assessments without

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<sup>47</sup> Ibid, para. 184.

<sup>48</sup> DS291, European Communities – Measures Affecting the Approval and Marketing of Biotech Products, para. 4.602.

<sup>49</sup> Ibid, § 73226.

<sup>50</sup> Testosterone, progesterone, trenbolone acetate, zeranol and MGA.

<sup>51</sup> DS320, United States – Continued Suspension of Obligations in the EC-Hormones Dispute, paras 207–208.

<sup>52</sup> Vecchione (2012) 164.

producing at the end of the day sufficient scientific evidence. The interpretation of the DSB is predicated upon the assumption that there is a dichotomy between:

- the scientific output of an RA that allows a Member to set higher standards of protection; and
- the lack of available scientific evidence that allows a Member to enact provisional measures pending the confirmation by traditional RAs.

This dichotomy leaves a gap: a situation of unresolved uncertainty cannot be taken into account, neither under Article 5.1 nor under Article 5.7. In other words, there is no way to provide evidence of scientific uncertainty.<sup>53</sup> However, the fact that ‘acknowledging uncertainty is a pervasive and inherent condition of scientific knowledge does not make science less useful or important’.<sup>54</sup>

To conclude, this *sui generis* application of the principle departs from the more flexible interpretation that prevails in environmental law. It is difficult to follow this line of reasoning, in particular in the light of Articles 10(6) and 11(8) of the Cartagena Protocol on Biosafety which link precaution and ‘insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effect’. It would therefore appear that the AB’s reasoning is mistaken.

### VI.43.3 The GATT Agreement

Article XX of the GATT provides that:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in the Agreement shall be construed to prevent the adoption or enforcement by any contracting parties of measures: . . .

- (b) necessary to protect human, animal, or plant life or health; . . .
- (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption . . .

Though Article XX(b) does not require the performance of an RA, the AB found in *EC-Asbestos* that the risk entailed by this mineral has to be of a ‘very serious nature’.<sup>55</sup> Moreover, it is settled case law that the Members have the right to choose an appropriate level of protection.<sup>56</sup> Given that the evidence of health impact of the use of asbestos was clearly established, France did not have to rely on the PP.

Regarding Article XX(g), the AB requires a ‘substantial relationship between the measure at issue and the objective of conservation. That relationship should not be ‘merely incidental or inadvertently aimed at conservation’.<sup>57</sup> At this stage, it is somewhat

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<sup>53</sup> Ibid, 168.

<sup>54</sup> Vecchione (2011) 227–239.

<sup>55</sup> AB, *EC-Asbestos*, para. 84.

<sup>56</sup> Ibid, para. 85.

<sup>57</sup> AB, DS2, US – Standards for Reformulated and Conventional Gasoline, at 19.

difficult to determine the extent to which the DSBs would be ready to take into consideration a precautionary approach in assessing the validity of this derogation.

#### VI.43.4 Conclusions

Though the PP came into the forefront in cases regarding the SPS Agreement, its scope remains unsettled. Indeed, significant questions remain regarding the right of WTO Members to invoke the PP in order to justify trade-restrictive measures. The obligation to perform an RA cannot be bypassed thanks to the enactment of provisional measures. These measures are time-limited. From a legal perspective, the lessons drawn from the case law on the application of the SPS Agreement cannot be transposed in the field of environmental protection to other types of RA procedures. These conditions are peculiar to the SPS discipline. Last but not least, whether Article XX(b)–(g) of the GATT Agreement allows Members to enact precautionary measures remains to be seen.

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