

# Green government procurement and the WTO

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W-03/06

April, 2003

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## Executive summary

One of the aspects of trade, with which the World Trade Organization (WTO) is concerned, is government procurement of goods and services. Government entities purchase a wide range of goods and services, and have an important market impact in domestic economies. Through their procurement, governments may desire to pursue objectives and policies that are not connected directly to the primary objective of financially responsible purchasing, such as the promotion of domestic industries, which may lead to discrimination. Therefore, the plurilateral Agreement on Government Procurement (GPA) of the WTO provides rules for procurement behaviour of governments.

Government procurement can be used as a tool of environmental policy (“green” procurement), but it needs to be clarified to what extent environmental requirements are compatible with the rules on non-discrimination and transparency of the GPA. With this in mind, the following research questions are being addressed in the study:

- What are the obligations on government procurement contained in the WTO legal framework?
- To what extent do ongoing negotiations in the WTO Committee on Trade and Environment provide indications for the direction the WTO is heading in the area of green procurement?
- What are the opportunities offered by the current WTO legal framework to accommodate a greener public procurement in terms of weighing environmental gains against trade principles based on Article XXIII GPA, taking into account WTO jurisprudence? Article XXIII contains an environmental exception to justify violations of the GPA.

This study was performed in the context of Work Package 12 of the EU project “Environmental relief potential of urban action on avoidance and detoxification of waste streams through green public procurement” (RELIEF).

The World Trade Organization (WTO) is currently the only global organization that deals with the rules of trade between nations. The WTO provides for various international agreements, which concern multiple issues of trade relations, such as the General Agreement on Tariffs and Trade (GATT) and the General Agreement on Trade in Services (GATS). Because government procurement is still largely excluded from the multilateral agreements, the GPA currently is the most important instrument of the WTO dealing with government procurement. The two main principles of this agreement are non-discrimination and transparency. The coverage of the GPA is limited in several ways: it does not cover all products, services and government entities of the members to the agreement, and also only applies to procurement above certain thresholds. The GPA contains a basic non-discrimination provision, and specific provisions with requirements that have to be followed in a tendering procedure. These requirements concern amongst others the composition of technical specifications, the selection and qualification of suppliers, and the awarding of contracts. Currently, there are a few developments with regard to government procurement within the WTO that are worth mentioning. At a plurilateral level, the GPA is being reviewed by the Committee on Government Procurement. At a multilateral level, negotiations on government procurement of services and on transpar-

ency in government procurement are ongoing. The latter are intended to result in a new multilateral agreement.

In the context of the GPA, the issue of “green” procurement as such has never been discussed. In general, however, the environment has received increased attention within the WTO. It is therefore not unreasonable to assume that attention will be paid to the issue of green public procurement issues within the WTO in future discussions and negotiations. In 1994, a Committee on Trade and Environment (CTE) was established, which is open to all members of the WTO. In this Committee, all sorts of issues related to trade and environment have been and are being discussed. None of the items on the agenda of the Committee on Trade and Environment specifically addresses green public procurement, but this does not make the items irrelevant to this area. Firstly, the CTE has encouraged WTO members to undertake environmental reviews on a voluntary basis. An environmental review of the GPA could be helpful in pinpointing possible conflicts between the GPA and the greening of public procurement. No such review has been conducted yet. Secondly, the multilateral debate on processes and production methods (PPMs), and eco-labelling criteria referring to them, is relevant for green government procurement, because PPMs are explicitly included in the list of possible technical specifications of the GPA. In particular, it is highly debatable if it is allowed to include non-product related PPM criteria in technical specifications. Although in the multilateral discussions and negotiations between 1994 and 2002 no agreement has been reached on several matters regarding PPMs and eco-labelling, it seems that the tensions between WTO members can be at least partly resolved by increasing transparency and the participation of a broader group of stakeholders in the development of eco-labelling criteria. This implies that it will be less controversial to refer to eco-labels developed in a transparent manner, with participation of foreign producers in technical specifications than to refer to technical specifications referring to ‘national’ eco-labels.

The application of environmental criteria in procurement processes is in general allowed by the WTO rules on government procurement, provided that the two main principles of the WTO procurement regime, transparency and non-discrimination, are respected. Both the General Agreement on Tariffs and Trade (GATT) and the GPA contain general exceptions, which can be invoked when a violation of provisions of the respective agreements has been found by a WTO review body. There are textual similarities between the environmental exception of the GPA and the exception of Article XX (b) of the GATT, which can justify a similar application of case law related to Article XX GATT to Article XXIII of the GPA. The other environmental exception of the GATT, Article XX (g) does not have an equivalent in the GPA. A party wanting to successfully invoke Article XX (b) GATT and similarly, Article XXIII GPA, needs to prove that (1) the pursued environmental policy falls within policies designed to protect human, animal or plant life or health; (2) the measure was necessary to fulfil the policy objective; and (3) the requirements of the introductory clause (chapeau) are fulfilled. Usually, the first requirement does not cause any problems for the party invoking the exception. The second requirement of ‘necessity’ involves a process of weighing and balancing a series of factors, which include the contribution of the measure to the policy pursued, the importance of the common interests or values protected, and the accompanying impact on trade. The third requirement contains three subrequirements: the measure applied may not be a means of arbitrary or unjustifiable discrimination, and may not constitute a disguised re-

striction to international trade. These requirements have been elaborated and interpreted in WTO case law. From this case law, it can be concluded that there are possibilities to allow for greener public procurement based on scientific evidence. These are mainly given by the flexible approach towards ‘necessity’ that has been used in more recent case law. It seems that it is also possible to take into account environmental benefits in the assessment of the requirements of the chapeau.

Although at first sight the WTO certainly does not create a great barrier to green procurement, it can be observed that the relationship between the WTO framework on government procurement and greener purchasing is not yet fully clarified. Some clarification might be provided through the ongoing discussions and negotiations on government procurement and on the environment, if these topics are indeed linked. As for weighing environmental gains against trade principles, this is possible under the GPA in the determination of the necessity requirement of Article XXIII of the GPA, and it is plausible that environmental considerations can be taken into account in determining whether the requirements of the chapeau have been fulfilled.

On the basis of the study, the following recommendations have been formulated, divided into policy and research recommendations.

Policy recommendations are:

- Members to the GPA, including the EU and its Member States, should put the issue of the greening of government procurement on the agenda of the WTO negotiations by, for instance, linking the negotiations on transparency in government procurement and on environmental issues in order to start a debate on green government procurement within the WTO;
- Members to the GPA, including the EU and its Member States, should undertake an environmental review of the GPA or include a review of the GPA in an environmental review of the entire WTO;
- Members to the GPA, including the EU and its Member States, should suggest in discussions on government procurement that the exception of the GPA should also accommodate the environmental exception of Article XX (g) GATT;
- Members to the GPA, including the EU and its Member States, should explore the opportunities of clarifying the GPA by referring cases related to green government procurement to the review body of the WTO;
- The Committee on Government Procurement should provide clarification in its current review of the GPA with regard to several Articles of the GPA relevant for green government procurement.

Research recommendations are:

- Examine the opportunities the GPA offers for green government procurement in more detail, in order to increase legal certainty;
- Examine the compatibility of actual green procurement practices within the territories of (both European and non-European) GPA members with the WTO law on government procurement in a detailed manner;
- Examine the diverging attitudes of members and non-members to the GPA countries towards green government procurement, in order to create a dialogue on green procurement between different stakeholders.





# 1. Introduction

## 1.1 Background and scope of the study

One of the aspects of trade, with which the World Trade Organization (WTO) is concerned, is government procurement of goods and services. Government entities purchase a wide range of goods and services, from smaller items like pens or paper, to major pieces of capital equipment, such as government buildings or infrastructure. Public procurement deals with the purchase of goods and services by public authorities primarily to fulfil their public responsibilities.<sup>1</sup> Recent measurements of the size of government procurement markets have resulted in estimations that, globally, government procurement accounts for an average of 15-20% of GDP.<sup>2</sup> Government procurement thus has an important market impact in domestic economies. Although governments try to ensure best value for (taxpayers') money through their procurements, they may also desire to pursue other objectives and policies that are not connected directly to the primary objective of financially responsible purchasing, such as the promotion of domestic industries.<sup>3</sup> This may result in practices and procedures that discriminate against foreign suppliers, which may, in turn, lead to distortions in international trade.<sup>4</sup> However, the subject of government procurement has not been covered by global trading rules for a long time. And although the matter is still not subject to multilateral rules, the situation has gradually changed with the conclusion of the plurilateral<sup>5</sup> agreements on government procurement of 1979 and of 1996. The latter agreement currently regulates the government procurement behaviour of its signatories, based on the two main principles of non-discrimination and transparency.

One of the policies for which public procurement can be used as a tool is environmental policy.<sup>6</sup> Since government purchasing corresponds to a large part of GDP, and involves a very wide range of goods and services, public procurement may influence or enhance environmental protection.<sup>7</sup> A better environment can be attained by the greening of public procurement in a number of ways:

- Directly, by demanding products and services with a lower overall environmental impact;
- Indirectly, by putting pressure on producers to develop products and services with a lower environmental impact;

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<sup>1</sup> See Van der Grijp (1998), p. 60.

<sup>2</sup> OECD (2002), p. 25.

<sup>3</sup> See Hoekman (1997), p. 1.

<sup>4</sup> Ibid.

<sup>5</sup> Plurilateral agreements are the WTO agreements, which are not signed by all WTO members, and only bind those members that have signed them.

<sup>6</sup> These policies are sometimes called "secondary" policies. Arrowsmith (2003), p. 15, defines them as "those that do not relate to the main object of the procurement – the acquisition of the product or services". Other secondary policies procuring entities may wish to pursue include social and industrial policies.

<sup>7</sup> See Van der Grijp (1998), and OECD (1999), p. 4.

- Indirectly, by improving the market position of environmentally preferable products and services;
- Indirectly, by setting an example for other consumers.<sup>8</sup>

Although public authorities increasingly purchase goods and services with environmental considerations taken into account, doubts remain whether environmental requirements are compatible with the rules on non-discrimination and transparency of the WTO, which are laid down mainly in the Agreement on Government Procurement (GPA). There is a danger that the use of environmental considerations in public procurement discriminates between domestic and foreign suppliers, and that it reduces the transparency of the procurement procedures.<sup>9</sup> In this regard, the greening of public procurement may possibly conflict with international trade rules on government procurement. The problem is that it still needs to be clarified under which circumstances the greening of public procurement may constitute a barrier to trade, and under which circumstances the rules on government procurement may constitute a barrier to green public procurement.<sup>10</sup>

In this study I will look into the WTO framework on government procurement and explore the relationship with environmental issues. This study will attempt to give indications for the directions the WTO is heading in the area of green government procurement. It also seeks to explore the opportunities for weighing environmental gains against trade principles under the current WTO framework on government procurement. It is, however, not the intention to examine in detail the opportunities for green government procurement under the current WTO framework.

This study was performed in the context of Work Package 12 of the EU project “Environmental relief potential of urban action on avoidance and detoxification of waste streams through green public procurement” (RELIEF) (Contract EESD-EVK-2000-00723) in the period from 1 November 2002 until 1 March 2003.

## 1.2 Research questions

The main research questions that will be addressed in this study are:

- What are the obligations on government procurement contained in the WTO legal framework?
- To what extent do ongoing negotiations in the WTO Committee on Trade and Environment provide indications for the direction the WTO is heading in the area of green procurement?
- What are the opportunities offered by the current WTO legal framework to accommodate a greener public procurement in terms of weighing environmental gains against trade principles based on Article XXIII GPA, taking into account WTO juris-

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<sup>8</sup> See Van der Grijp (1998), p. 61.

<sup>9</sup> See McCrudden (1999), p. 11. McCrudden formulates these concerns with regard to social considerations in government procurement decisions. In my opinion, these concerns are equally applicable to environmental considerations, since these considerations are also not directly related to the main objective of government procurement (best value for money), and because these considerations may also have discriminatory effects towards foreign suppliers.

<sup>10</sup> See Sørensen and Russel (1998), p. 99.

prudence? Article XXIII contains an environmental exception to justify violations of the GPA.<sup>11</sup>

Sub-questions include:

- Where does the burden of proof lie, if an environmental exception is invoked?
- Which role can scientific evidence play if the environmental exception of Article XXIII GPA is invoked?
- How can environmental gains be weighed against trade principles, in a number of illustrative cases:
  - Forest Stewardship Council (FSC) certified wood;
  - Regional foodstuffs;
  - Green electricity?

### 1.3 Outline

In the following chapter I will give some background information on the WTO and on the Agreement on Government Procurement (GPA). Some of the most important features of this Agreement will be discussed in more detail. Finally, some attention is being paid to the current developments in the WTO related to government procurement.

In Chapter 3, I will look at the work and negotiations in the Committee on Trade and Environment, and examine what possible directions there are for green government procurement within the WTO. This chapter also points out some of the situations in which there could be tensions between green procurement criteria and WTO rules.

In Chapter 4, I will examine the possibility to weigh environmental benefits of government procurement against trade principles under WTO law in case of a dispute. I will first look at the similarities between the environmental exceptions of the General Agreement on Tariffs and Trade (GATT) and the GPA, and then examine the requirements for invoking the exception of the GATT, developed in WTO case law. The implications of those requirements for the exception of the GPA will be illustrated by some examples in the last section.

Finally, in Chapter 5, I will provide some conclusions, and recommendations for policy and research.

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<sup>11</sup> See Chapter 4.



## 2. The WTO and government procurement

### 2.1 The WTO in overview

The World Trade Organization (WTO) is currently the only global organization that deals with the rules of trade between nations.<sup>12</sup> It came into being on 1 January 1995, as a result of the Uruguay Round of trade negotiations. The WTO provides for various international agreements, which concern multiple issues of trade relations. These WTO Agreements, which are signed by many trading nations, are at the heart of the organization.<sup>13</sup> The WTO not only intends to further the implementation, administration and operation of the WTO Agreements, but it also serves as a forum for further negotiations and seeks to resolve disputes between WTO members through its dispute settlement mechanism.

The main objectives of the WTO can be found in the Preamble to the WTO Charter. In the first paragraph of the WTO Charter, the following goals are mentioned: “Raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development”.

Throughout the WTO Agreements, a number of fundamental principles can be identified that run throughout the trading system.<sup>14</sup> These include principles such as non-discrimination, predictability and stability, transparency, and the promotion of fair trade. Non-discrimination basically means that a country should not discriminate between producers from other member countries and domestic producers, (the ‘national treatment’ principle) and that a country should not discriminate between its trading partners (the ‘most-favoured nation’ principle).

The most important agreement under the WTO is the General Agreement on Tariffs and Trade (GATT), which is related to the international trade in goods. The two other main agreements are the General Agreement on Trade in Services (GATS) and Trade-Related Aspects of Intellectual Property Rights (TRIPS), dealing respectively with international trade in services and intellectual property rights. Other WTO agreements concerned with the trade in goods are *inter alia* the Agreement on Technical Barriers to Trade (TBT), which deals with the international harmonization of technical regulations and standards, and the Agreement on Sanitary and Phytosanitary Measures (SPS), which is intended to ensure that health and safety measures are not being used to protect domestic produc-

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<sup>12</sup> The members of the WTO include major trading nations, such as the United States, Canada, Japan, China, India, and the Member States of the EU. Although Russia is not a member of the WTO, it has an observer status. For details on the membership, see [http://www.wto.org/english/thewto\\_e/whatis\\_e/tif\\_e/org6\\_e.htm](http://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm), accessed on 31 March 2003.

<sup>13</sup> See WTO (2001), p. 4.

<sup>14</sup> See WTO (2001), pp. 5-7.

ers.<sup>15</sup> There are also WTO agreements, which are - in contrast with the other WTO Agreements - signed by a smaller group of WTO members, the so-called plurilateral trade agreements. I will discuss one of these agreements now, the Agreement on Government Procurement (GPA).

## 2.2 The Agreement on Government Procurement

### General

When the GATT came into existence in 1947, there was very much resistance to the inclusion of the subject of government procurement into the agreement.<sup>16</sup> Therefore, the final text of the GATT 1947 excluded “the procurement by governmental agencies of products purchased for governmental purposes” from the obligation of national treatment.<sup>17</sup> Two decades later, discussions on the topic had started to take place in the Organization for Economic Cooperation and Development (OECD).<sup>18</sup> These formed the basis for the 1979 Agreement on Government Procurement.<sup>19</sup> This Agreement was a plurilateral agreement, which means that it only binds the countries that are party to it. The membership of the 1979 Agreement was mainly limited to the industrialized OECD countries. This Agreement was amended in 1987, and was replaced at the end of the Uruguay Round by the new Agreement on Government Procurement (GPA) of 1994, which was signed together with the other WTO agreements.<sup>20</sup> The GPA kept the plurilateral character of the previous agreement, which means that the membership is still limited.<sup>21</sup> Because government procurement is still largely excluded from the multilateral agreements<sup>22</sup>, the GPA is currently the most important instrument of the WTO dealing with government procurement.

The objectives of the GPA can be found in the Preamble to the Agreement. It aims to achieve “greater liberalization and expansion of world trade and improving the interna-

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<sup>15</sup> Other important WTO agreements related to trade in goods include the Agreements on Agriculture and on Textiles and Clothing, the Anti-Dumping Agreement, the Agreement on Subsidies and Countervailing Measures, and the Agreement on Safeguards.

<sup>16</sup> Many countries, such as the United Kingdom, did not want to subject public procurement to the most-favoured nation and the national treatment obligations. See Blank and Marceau (1997), pp. 31-37.

<sup>17</sup> Art. III (8) (a) GATT 1947. Some authors argue that procurement is also exempted from the most-favoured nation obligation of the GATT. See for example Arrowsmith (2003), p. 62.

<sup>18</sup> See Reich (1999), p. 106. Discussions on the subject also started in different regional fora, such as the EC.

<sup>19</sup> The Agreement on Government Procurement, 12 April 1979, 18 ILM 1052. It entered into force on 1 January 1981.

<sup>20</sup> For a very comprehensive study of the GPA, see Arrowsmith (2003). The GPA can be found at the WTO website: [http://www.wto.org/english/docs\\_e/legal\\_e/gpr-94\\_e.pdf](http://www.wto.org/english/docs_e/legal_e/gpr-94_e.pdf), accessed on 31 March 2003).

<sup>21</sup> These countries, however, include some of the main economic powers, such as the US, the EU, Canada, and Japan.

<sup>22</sup> Not only the GATT excludes government procurement from its most important disciplines, but so does the GATS (Article XIII). The TBT excludes government procurement measures from all its provisions (Article 1.4). See Arrowsmith (2003), pp. 76-78.

tional framework for the conduct of world trade".<sup>23</sup> The Agreement then mentions the two important principles of non-discrimination and transparency.<sup>24</sup> These principles are further elaborated in the Agreement.

### Coverage

The GPA applies to "any law, regulation, procedure or practice regarding any procurement by entities covered".<sup>25</sup> There are limitations to the coverage of the GPA, however. Firstly, the product and service coverage is limited. With regard to goods, the GPA uses a so-called negative list approach. This means that all goods are covered in principle, unless the goods are expressly excluded in the Annexes<sup>26</sup> to the GPA by a certain member.<sup>27</sup> However, for services a positive list approach is used. This means that the Agreement only applies to the services, which are included in the Annexes to the GPA.<sup>28</sup> A distinction is made by the GPA between construction services and other services. The former are included in Annex 5 of the parties, while the latter are laid down in Annex 4 of the parties. For construction services, the Annexes of the parties have a more or less uniform approach.<sup>29</sup> For the other services, this could not be achieved. The result is that the lists of these services differ widely between parties.<sup>30</sup> The fact that some members require reciprocity makes the lists of Annexes 4 and 5 even more restricted.<sup>31</sup>

A second limitation of the GPA is the number of entities it covers. Annexes 1-3 specify for each member which entities are covered by the GPA. Annex 1 contains the central government entities, Annex 2 the sub-central government entities, and Annex 3 contains all other entities, which procure in accordance with the provisions of the GPA.

Thirdly, the GPA is limited in that it only applies to procurement contracts, which are above a certain financial threshold. As with the entity coverage and the product/service coverage, the thresholds also differ between members. Table 2.1 shows the thresholds that parties to the GPA have in general determined for their different entities.<sup>32</sup>

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<sup>23</sup> Preamble, paragraph 1.

<sup>24</sup> Preamble, paragraphs 2 and 3.

<sup>25</sup> Article I (1) GPA.

<sup>26</sup> The GPA has 4 Appendices, which are an integral part of the Agreement (Art. XXIV (12) GPA). The first Appendix consists of 5 Annexes that contain lists and notes of each member, in which the coverage of the member's obligations are determined. Appendices II-IV consist of lists of publications the members use to fulfil the GPA's transparency requirements.

<sup>27</sup> Goods expressly excluded in the Annexes of parties are mainly military materials, but sometimes also regular products are excluded.

<sup>28</sup> See Reich (1999), p. 287.

<sup>29</sup> Ibid., p. 288.

<sup>30</sup> Ibid., p. 288. With the exception of the lists of the EC countries, which are almost identical.

<sup>31</sup> Ibid., p. 289. With reciprocity, it is meant that one member only lists a service category with regard to another member, if that other member has done the same. See also Hoekman and Mavroidis (1997a), p. 16.

<sup>32</sup> The exact thresholds for each party can be found at the WTO website:

[http://www.wto.org/english/tratop\\_e/gproc\\_e/thresh\\_e.htm](http://www.wto.org/english/tratop_e/gproc_e/thresh_e.htm), accessed on 31 March 2003.

Table 2.1 *Thresholds of the GPA.*

Entity	Goods/services	Threshold
Annex 1 entities (central government entities)	Goods	130,000 SDR <sup>33</sup> (172,880 EUR)
	Services (except construction services)	130,000 SDR (172,880 EUR)
	Construction services	Varying: between 4,500,000 and 8,500,000 SDR (5,984,325 and 11,303,725 EUR)
Annex 2 entities (sub-central government entities)	Goods	Varying: between 200,000 and 355,000 SDR (265,970 and 472,097 EUR)
	Services (except construction services)	Varying: between 200,000 and 355,000 SDR (265,970 and 472,097 EUR)
	Construction services	Varying: between 5,000,000 and 15,000,000 SDR (6,649,250 and 19,947,750 EUR)
Annex 3 entities (other entities)	Goods	Varying: between 130,000 and 450,000 SDR (172,880 and 598,433 EUR)
	Services (except construction services)	Varying: between 130,000 and 450,000 SDR (172,880 and 598,433 EUR)
	Construction services	Varying: between 5,000,000 and 15,000,000 SDR (6,649,250 and 19,947,750 EUR)

Fourthly, some other exceptions that limit the scope and coverage of the GPA are possible. It has been mentioned before that some parties require reciprocity for specified services. Parties have also set conditions to achieve reciprocal coverage of entities and/or products.<sup>34</sup> In order to determine the extent of parties' coverage, it is thus not only important to read the specific Annexes, but also to read parties' General Notes at the end of the Annexes. In these General Notes, derogations from the general obligations of the GPA are specified for certain entities, products and/or services. Finally, the GPA contains exceptions for developing countries<sup>35</sup>, and two general exceptions.<sup>36</sup>

<sup>33</sup> The SDR is the currency of the IMF. As of 1 November 2002, the value of 1 SDR = 1.32985 EUR. This exchange rate shall be used throughout this paper. For a brief explanation of how the value of SDR is calculated, see: <http://www.imf.org/external/np/exr/facts/sdr.HTM>, accessed on 31 March 2003.

<sup>34</sup> See Hoekman and Mavroidis (1997a), p. 16.

<sup>35</sup> Article V GPA.



## Provisions of the GPA

The GPA contains a basic non-discrimination provision, which determines that parties to the GPA are required to give the products, services and suppliers of any other party treatment no less favourable than that they give to their domestic products, services and suppliers (national treatment obligation), and not to discriminate between products, services and suppliers of other parties (most-favoured nation obligation).

In addition to this basic obligation, the GPA contains specific provisions with requirements that have to be followed in a tendering procedure. The GPA does not intend to give an exhaustive list of procedural rules, but these rules give minimum procedural standards. Article VI gives specific obligations for technical specifications, prescribed by procuring entities. It requires that technical specifications do not create “unnecessary obstacles to trade”, and that, “where appropriate”, these specifications shall “be in terms of performance rather than design or descriptive characteristics”, and be based on international standards, where these exist. Article VI (1) gives several examples of technical specifications: “quality, performance, safety and dimensions, symbols, terminology, packaging, marking and labelling, or the processes and methods for their production and requirements relating to conformity assessment procedures”. It can be observed that processes and production methods (PPMs) are included in this list. Article VI also demands that “there shall be no requirement or reference to a particular trademark or trade name, patent, design or type, specific origin, producer or supplier, unless there is no sufficiently precise or intelligible way of describing the procurement requirements and provided that words such as “or equivalent” are included in the tender documentation”.

Article VIII of the GPA contains some qualification and exclusion criteria in order to determine the capability of a supplier to fulfil the contract. The procuring entity has to assess the qualifications of suppliers on the basis of these criteria, which include financial guarantees, technical qualifications and information necessary for establishing the financial, commercial and technical capacity of the suppliers. Whatever the criteria used for qualification are, Article VIII (b) determines that these “shall be limited to those which are essential to ensure the firm’s capability to fulfil the contract in question”. The GPA also specifies detailed rules for the several steps of the tendering process in order to ensure transparency and non-discrimination.<sup>37</sup>

Article XIII (4) (b) of the GPA gives rules on award criteria. Basically, there are two criteria for the awarding of a contract. The first criterion, on which the award of a contract can be based, is that of the lowest (priced) tender. The other criterion is that of the most advantageous tender, a criterion which is based on specific evaluation criteria laid down in the notices or in tender documentation.

Enforcement of the Agreement happens in different ways. Firstly, parties are required to publish all procurement legislation and, if requested, to explain this legislation to any other party.<sup>38</sup> Secondly, they have to collect statistics on its procurements each year,

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<sup>36</sup> Article XXIII GPA. See *infra* chapter 4.

<sup>37</sup> See, for instance, Article IX for the requirements related to the publication of an ‘invitation to participate’, Article XI for time-limits and deadlines for the tendering process, and Article XII for the requirements related to tender documentation provided to suppliers.

<sup>38</sup> Art. XIX (1) GPA.

which have to be forwarded to the Committee on Government Procurement.<sup>39</sup> A third way allows for private judicial enforcement.<sup>40</sup> The GPA also utilizes the dispute settlement mechanism of the WTO in a way that is suitable for government procurement.<sup>41</sup> It should be noted that there have not been many cases under the GPA and its 1979 predecessor.<sup>42</sup>

### 2.3 Current developments

A distinction can be made between three current developments within the WTO system that involve government procurement. In all three developments, recognition of the desire to deal with the matter of government procurement on a multilateral level, and thus to increase participation by non-parties to the GPA, can be observed.<sup>43</sup>

The first development is taking place on a plurilateral level, within the context of the GPA. The Committee on Government Procurement serves as a negotiating forum under the GPA.<sup>44</sup> It consists of representatives of the parties. In the Committee, discussions take place on various topics related to the GPA.<sup>45</sup> The Committee decided in their 1996 annual report to the General Council to undertake an early review of the GPA. It was stated that: "The review will, in particular, cover the following elements:

- Expansion of the coverage of the Agreement;
- Elimination of discriminatory measures and practise which distort open competition; and
- Simplification and improvement of the Agreement, including, when appropriate, adaptation to advances in the area of information technology."<sup>46</sup>

Discussions related to the review have mainly focused on the simplification and improvement of the Agreement. Drafting changes to several Articles of the Agreement have been submitted, and these are still being discussed extensively.<sup>47</sup>

A second discussion on government procurement within the WTO is taking place in the context of the General Agreement on Trade in Services (GATS). It has been mentioned

<sup>39</sup> Art. XIX (5) GPA.

<sup>40</sup> Art. XX GPA.

<sup>41</sup> Art. XXII (1) GPA. Special rules because of the nature of government procurement can be found in paragraphs 3, 5, 6 and 7 of Article XXII.

<sup>42</sup> The cases related to government procurement that have come before dispute settlement bodies of the WTO can be found at: [http://www.wto.org/english/tratop\\_e/gproc\\_e/disput\\_e.htm](http://www.wto.org/english/tratop_e/gproc_e/disput_e.htm), accessed at 31 March 2003. See Marissing (1995), pp. 229-230, for a possible explanation of the limited use of the dispute settlement system under the 1979 Agreement.

<sup>43</sup> For discussions of reasons behind the limited interest of many (developing) countries to participate in global agreements on government procurement, and possibilities to increase this interest, see: Hoekman and Mavroidis (1997b), and Reich (1999), pp. 350-354. See also Arrowsmith et al. (2000), pp. 203-207, and Dischendorfer (2000), pp. 25-28.

<sup>44</sup> The Committee is established pursuant to Article XXI GPA.

<sup>45</sup> Such as modifications of Appendices of parties to the Agreement, the determination of thresholds, and negotiations on the future of the Agreement.

<sup>46</sup> Report (1996) of the Committee on Government Procurement, GPA/8, paragraph 22.

<sup>47</sup> See Report (2002) of the Committee on Government Procurement, GPA/73, paragraphs 34-37.

that government procurement is excluded explicitly from the main obligations of the GATS. This is partly reversed by the GPA, which covers services to some extent. Article XIII (2) of the GATS calls for multilateral negotiations on government procurement in services. These negotiations have started in the Working Party on GATS Rules, which was established in 1995. Negotiations have mainly focused on the definition of government procurement of services, and on its scope and coverage. Discussions on the application of the non-discrimination principle were also held within the Working Party.<sup>48</sup>

The third ongoing discussion on government procurement is taking place within the Working Group on Transparency in Government Procurement. This Working Group was established at the Singapore Ministerial Conference in 1996.<sup>49</sup> The Working Group is mandated to “conduct a study on transparency in government procurement practices, taking into account national policies, and, based on this study, to develop elements for inclusion in an appropriate agreement”.<sup>50</sup> The need for a (multilateral) agreement on transparency in government procurement was reiterated at the Doha Ministerial Conference in 2001.<sup>51</sup>

The Working Group discusses various issues related to transparency on the basis of a “checklist” of items.<sup>52</sup>

The overlap between the three developments requires a proper coordination between the different fora.<sup>53</sup> In all three areas, negotiations are still ongoing, and have not yet resulted in many documents. It is therefore difficult to predict the outcome of these negotiations. With regard to a possible multilateral agreement on transparency in government procurement, the Declaration of the Doha Ministerial Conference stated that negotiations

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<sup>48</sup> For a discussion of the possibilities and difficulties of applying GATS rules to government procurement, see Reich (1999), pp. 356-358, Low et al. (1997), and Dischendorfer (2000), pp. 33-34. Reports and minutes of the Working Party on GATS Rules can be found at [http://www.wto.org/english/tratop\\_e/gproc\\_e/gpserv\\_e.htm](http://www.wto.org/english/tratop_e/gproc_e/gpserv_e.htm), accessed on 31 March 2003.

<sup>49</sup> See WTO (2001), p. 50.

<sup>50</sup> Singapore Ministerial Declaration, adopted on 13 December 1996, WT/MIN(96)/DEC, paragraph 21.

<sup>51</sup> Doha Ministerial Declaration, adopted on 14 November 2001, WT/MIN(01)/DEC/1, paragraph 26. The need for enhanced technical assistance and capacity building in the area of transparency in government procurement was also recognized.

<sup>52</sup> This checklist is an informal note by the Chair of the Working Group, named “List of the Issues Raised and Points Made”, JOB(99)/6782. Items on this list include: definition and scope of government procurement; procurement methods; information on procurement opportunities, tendering and qualification procedures; time-periods; transparency of decisions on qualification; transparency of decisions on contract awards. An old version of this list (JOB(99)/5534) is attached to the Report (1999) to the General Council, WT/WGTGP/3.

<sup>53</sup> This has particularly been stated various times by the Working Party on GATS Rules. Dischendorfer notes that transparency issues are not excluded from the mandate of the Working Party on GATS Rules, and that this area especially requires coordination. See Dischendorfer (2000), p. 33.

will take place after the next Ministerial Conference, which will take place in Cancún, Mexico, in September 2003.<sup>54</sup>

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<sup>54</sup> Doha Ministerial Declaration, adopted on 14 November 2001, WT/MIN(01)/DEC/1, paragraph 26.

### 3. Procurement and the trade and environment debate

#### 3.1 Introduction

In the context of the GPA, the issue of “green” procurement has never been discussed. The Agreement itself does not include any provisions, which explicitly relate to environmental considerations in government procurement, except for the general exception of Article XXIII. None of the disputes raised under the dispute settlement mechanism of the WTO dealt with the issue either. Finally, green public procurement is neither an issue on the agenda of the Committee on Government Procurement of the plurilateral GPA, nor is it currently dealt with in the ongoing multilateral negotiations on transparency in government procurement and on government procurement of services.

In general, the environment has received increased attention within the WTO. Although the linkage of trade and environment issues is certainly not new<sup>55</sup>, the relationship between trade and environment has only received much attention after the creation of the WTO in 1995. The objective of sustainable development is explicitly stated in the Preamble to the WTO Charter, with a reference to the protection and preservation of the environment. Moreover, the GATT 1994 and several other WTO Agreements contain provisions that take environmental protection into account.<sup>56</sup>

All WTO Agreements, including the GPA, address States through their central governments, and provide a framework for trade liberalization through increasing international competition. However, there is an important difference between the plurilateral GPA as opposed to the other multilateral WTO Agreements, which is related to the nature of government procurement.<sup>57</sup> In private markets, governments merely act as regulators, whereas in public markets, such as procurement markets, governments participate as actors rather than regulators.<sup>58</sup> Under the multilateral WTO agreements that concern market access, the governments seek to represent the interests of the main actors in that market, the private firms and the consumers. Under the GPA, the governments are regulating themselves as an actor in the public market, and are thereby restricting their power as consumers.<sup>59</sup>

Because of the lack of information on the relationship between the GPA and environmental issues, some parallels will be drawn here with the discussions and negotiations on

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<sup>55</sup> In the beginning of the seventies, the contracting parties to the GATT recognized the need to address environmental issues related to trade in the GATT. See WTO (2002), p. 4.

<sup>56</sup> Article XX of the GATT, and Article XIV of the GATS contain general exceptions related to environmental protection. Other provisions of the WTO Agreements related to the environment include: Article 27 of TRIPS; Article 2 of the TBT Agreement; Annex A, Article 1 of the SPS Agreement; Annex 2, Article 12 of the Agriculture Agreement.

<sup>57</sup> Obviously, there are also textual differences between the GPA and the other WTO Agreements that, to a certain extent, relate to this more fundamental difference. I will not deal with these textual differences here.

<sup>58</sup> Dischendorfer (2000), p. 5.

<sup>59</sup> *Ibid.*, p. 6.

environmental issues on a multilateral level within the WTO. These parallels will be drawn, despite the difference between the nature of the GPA and the other WTO Agreements. But it cannot be said with certainty that the multilateral discussions and negotiations on trade and environment are equally applicable to government procurement. The multilateral discussions and negotiations can, however, give some indications.

### 3.2 The Committee on Trade and Environment

At the end of the Uruguay Round, in 1994, a Committee on Trade and Environment (CTE) was established following the adoption of a Ministerial Decision on Trade and Environment.<sup>60</sup> In this Committee, all sorts of issues related to trade and environment have been and are being discussed. The CTE is open to all members of the WTO. A number of observers from intergovernmental organizations are also represented in the Committee. The CTE reports to the General Council. Discussions in the CTE are guided by certain parameters. These include:

- The consideration that the competence of the WTO is limited to trade policies, and the trade-related aspects of environmental policies, which may have a significant effect on trade;
- The consideration that there is already significant scope for environmental policies, provided that they are non-discriminatory;
- The consideration that market access opportunities are essential to help developing countries work towards sustainable development;
- The consideration that increased national coordination as well as multilateral cooperation is necessary to adequately address trade-related environmental issues.<sup>61</sup>

In 1996, the CTE delivered a first report to the Singapore Ministerial Conference. In this report, the CTE distinguished between ten trade/environment related items, based on the 1994 Ministerial Decision. These items are:

- Item 1: The relationship between the provisions of the multilateral trading system and trade measures for environmental purposes, including those pursuant to multilateral environmental agreements;
- Item 2: The relationship between environmental policies relevant to trade and environmental measures with significant trade effects and the provisions of the multilateral trading system;
- Item 3 (a): The relationship between the provisions of the multilateral trading system and charges and taxes for environmental purposes;
- Item 3 (b): The relationship between the provisions of the multilateral trading system and requirements for environmental purposes relating to products, including standards and technical regulations, packaging, labelling and recycling;

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<sup>60</sup> The 1994 Marrakesh Ministerial Decision on Trade and Environment can be found on the WTO website: [http://www.wto.org/english/tratop\\_e/envir\\_e/issu5\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/issu5_e.htm), accessed on 31 March 2003.

<sup>61</sup> See WTO (2002), p. 7.

- Item 4: The provisions of the multilateral trading system with respect to the transparency of trade measures used for environmental purposes and environmental measures and requirements which have significant trade effects;
- Item 5: The relationship between the dispute settlement mechanisms in the multilateral trading system and those found in multilateral environmental agreements;
- Item 6: The effect of environmental measures on market access, especially in relation to developing countries, in particular to the least developed among them, and environmental benefits of removing trade restrictions and distortions;
- Item 7: The issue of exports of domestically prohibited goods;
- Item 8: The relevant provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights;
- Item 9: The work programme envisaged in the Decision on Trade in Services and the Environment;
- Item 10: Input to the relevant bodies in respect of appropriate arrangements for relations with intergovernmental and non-governmental organizations referred to in Article V of the WTO.

Some of these items deal with related issues, such as items 1 and 5, and are therefore grouped in 'clusters'. Discussions in the CTE have also focused on these items after 1996.

The relationship between trade and environment received notable attention in the Doha Ministerial Declaration of November 2001.<sup>62</sup> Paragraphs 31-33 of the Declaration are reserved for trade and environment. These paragraphs call for negotiations on important issues, such as the relationship between multilateral environmental agreements (MEAs) and trade, eco-labelling, and the effects of environmental measures on market access, especially for developing countries. These negotiations are taking place in a so-called Special Session of the CTE.<sup>63</sup> It is important to keep in mind that although the environment is not mentioned explicitly in some other parts of the Doha Declaration, trade and environment issues may certainly play a role in other negotiations following the Declaration. It is for example likely that environmental issues arise in the negotiations on government procurement.<sup>64</sup> Before looking at this possibility, the work and the negotiations related to certain parts of the trade and environment concerns, as well as their relevance to green government procurement issues, will be discussed below.

### 3.3 Procurement and the work and negotiations in the CTE

None of the items on the agenda of the Committee on Trade and Environment specifically addresses green public procurement. This does not make the items irrelevant to this area. In fact, in discussions under a few items, the subject of green public procurement has been raised – although very briefly. In the context of government procurement, some

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<sup>62</sup> See WT/MIN(01)/DEC/1, paragraphs 31-33.

<sup>63</sup> This was decided by the Trade Negotiations Committee, in TN/C/1.

<sup>64</sup> See Von Moltke (2002), p. 4.

of the relevant items are items 2 and 3 (b).<sup>65</sup> Before discussing the work on these items, it should be noted first that work performed in the CTE until now has been both limited and inconclusive. Limited, because the work has been restricted to examining the impact of environmental regulation on trade, and not the reverse. Inconclusive, since the discussions in the CTE have not had any significant outcomes yet.<sup>66</sup> This is not surprising, because many parts of the trade and environment debate are not without controversy. Actors in the debate come from a wide variety of backgrounds, and have differing opinions on the solutions to trade and environment issues.<sup>67</sup> This diversity has resulted in the fact that the CTE has mainly served as a forum for analytical discussions on trade and environment issues, instead of serving as a forum for negotiations on the WTO rules.<sup>68</sup>

Discussions on Item 2 of the agenda have mainly focused on the treatment of environmental subsidies in the WTO.<sup>69</sup> These discussions will not be dealt with, since environmental subsidies directly or indirectly relieve or compensate the private sector for some amount of environmental costs<sup>70</sup>, and have no direct relation with government procurement. Other discussions under Item 2 can be relevant for greener procurement in the following way. Countries have conducted an increased amount of environmental reviews of trade agreements in recent years. The CTE has encouraged WTO members to undertake these reviews on a voluntary basis.<sup>71</sup> This practice has been reflected in the Doha Declaration, which encourages members to share expertise and experience with other members in order to perform environmental reviews at the national level.<sup>72</sup> Canada has recently undertaken an Initial Environmental Assessment of the WTO. Although government procurement was not discussed in that document, the possibility was left open.<sup>73</sup> An environmental review of the GPA could be helpful in pinpointing possible conflicts between the GPA and the greening of public procurement. Until now, no such review has been conducted.

The work of the CTE on Item 3 (b) should be examined in relation with discussions that take place in the Committee on Technical Barriers to Trade (CTBT) and which concern the same topic. This part concerns the important debate on eco-labels and processes and production methods (PPMs). In the debate on PPMs, a distinction can be made between product related PPMs and non-product related PPMs. In Box 3.1 I will exemplify both.

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<sup>65</sup> Not all items with possible relevance for government procurement are dealt with here. For instance, Item 9 of the agenda deals with issues related to trade in services and the environment. In this context, a Secretarial note mentioned government procurement of environmental services. It would be outside the scope of this study to examine this topic, and every other possibly relevant topic in detail.

<sup>66</sup> See Von Moltke (1999).

<sup>67</sup> See UNEP and IISD (2000), p. 3.

<sup>68</sup> *Ibid.*, p. 24.

<sup>69</sup> See WTO (2002), p. 14.

<sup>70</sup> See Van Calster (2000), quoting an OECD report of 1994.

<sup>71</sup> See WTO (2002), p. 15.

<sup>72</sup> See WT/MIN(01)/DEC/1, paragraph 33.

<sup>73</sup> The document can be found at <http://www.dfait-maeci.gc.ca/tna-nac/consult1-en.asp#wto>, accessed on 31 March 2003.



*Box 3.1 Different types of PPMs.*

Type	How to distinguish <sup>74</sup>	Example
Product related PPM	Leaves a trace on the final product	Organically produced apples, compared with 'normal' apples, if pesticide residues are present in the latter <sup>75</sup>
Non-product related PPM	Does not leave a trace on the final product	Tuna caught by driftnets, which also results in by catch of dolphins, compared with 'dolphin-friendly caught tuna

In principle, discrimination based on product related PPMs is accepted by the WTO.<sup>76</sup> Discrimination based on non-product related PPMs is more problematic, because these PPMs do not change the commercial or practical substitutability of the products. This criterion is being used to determine the 'likeness' of products, and the WTO does not allow for discrimination between 'like' products.<sup>77</sup> If countries are allowed to discriminate on the basis of non-product related PPMs, this may lead to disguised protection of their domestic industries. This is possible when the use of certain PPMs, which are already being used by domestic industries, is demanded. It is certainly possible that these PPMs are not being used in other countries, because the economic and/or environmental situation in those countries is entirely different. The problem is basically the same for eco-labelling, since eco-labels tend to be based on a life-cycle analysis, in which the environmental effects of products are examined from the cradle to the grave, including processes and production methods. Eco-labelling may limit the market access for a foreign supplier. This can happen through eco-labelling criteria, which are based on local environmental priorities<sup>78</sup>, or through the involvement of domestic suppliers in developing eco-labelling schemes.<sup>79</sup>

A different problem for eco-labels is that producers from foreign (developing) countries do not always have the technical or financial means to follow the procedure for being awarded an eco-label. This also reduces their market opportunities.<sup>80</sup>

The debate on PPMs and eco-labelling is also relevant for green government procurement, because PPMs are explicitly included in the list of possible technical specifications of the GPA<sup>81</sup>, and procuring entities may refer to them in the technical specifications. It is not clear whether non-product related PPMs are indeed allowed by the GPA.<sup>82</sup> In discussions in the CTE, Nigeria once mentioned the link between eco-labelling and government procurement in a request to the WTO Secretariat to write a note on eco-

<sup>74</sup> These examples give a very black and white description of the difference between non-product related and product related PPMs. It is important to remember that this distinction is not as clear as it may seem. For an explanation of this, see the remarks made by Switzerland in its submission to the Committee on Technical Barriers to Trade on 19 June 2001, WT/CTE/W/192; G/TBT/W/162, p. 4.

<sup>75</sup> See UNEP and IISD (2000), p. 42.

<sup>76</sup> Ibid.

<sup>77</sup> Ibid., p. 43.

<sup>78</sup> See OECD (1999), p. 13.

<sup>79</sup> See WTO (2002), p. 15.

<sup>80</sup> Ibid., p. 49.

<sup>81</sup> See Article VI (1) GPA.

<sup>82</sup> See Spennemann (2001), pp. 60-63, and Buck and Cameron (1999), pp. 19-20.

labelling. This note has, however, never been written, after the United States indicated that this issue should not be dealt with in the CTE.<sup>83</sup> Since then, the linkage between the environment and government procurement has not been discussed anymore in the CTE. It would probably not be disputed that technical specifications with product related PPM criteria are allowed, in a similar way that discrimination based on product related PPMs is allowed. The inclusion of non-product related PPM criteria in technical specifications is, however, highly debatable.

An issue that has been raised in discussions in both the CTE and the CTBT is to what extent voluntary eco-labelling schemes based on non-product related PPMs are covered by the Agreement on Technical Barriers to Trade (TBT), by the GATT, or by both.<sup>84</sup> This is due to the definition of 'standard' in Annex I to the TBT. It should be noted that the GPA uses the same definition of 'standard' in relation with the composition of technical specifications.<sup>85</sup> It can therefore be assumed that if the definition of 'standard' of the TBT includes non-product related PPMs (in other words, if non-product related PPMs are covered by the TBT), the definition of 'standard' of the GPA will also include these PPMs. A standard is defined as a "document approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method". Although the first sentence of this definition seems to exclude non-product related PPMs from the TBT Agreement, it has been observed that the second sentence casts doubt on this exclusion from the TBT.<sup>86</sup> The WTO Secretariat clarified the text of the TBT partly, by providing a note on the negotiating history of the TBT.<sup>87</sup> From that note, it seems that members did not intend to extend the coverage of the TBT to non-product related PPMs.<sup>88</sup> Certain members, such as Singapore<sup>89</sup> and India<sup>90</sup>, agree with this interpretation of the negotiating history. This view is, however, not undisputed<sup>91</sup>, which leaves the question unresolved. A solution is desirable, but might well be unattainable, since some members fear that this would set an undesirable precedent for other discussions regarding non-product related PPM measures.<sup>92</sup> There have been proposals to come to a solu-

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<sup>83</sup> See WT/CTE/M/14, paragraphs 61, 67, and 70.

<sup>84</sup> See Van Calster (2000), pp. 312-313.

<sup>85</sup> Footnote 4 to Article VI (2) (b).

<sup>86</sup> See Ward (1997), p. 143.

<sup>87</sup> See (Negotiating history of the coverage of the Agreement on Technical Barriers to Trade with regard to labelling requirements, voluntary standards, and process and production methods), WT/CTE/W/10; G/TBT/W/11.

<sup>88</sup> Ibid.

<sup>89</sup> See the statement of Singapore (also on behalf of other ASEAN countries) in WT/CTE/M/7, paragraph 65.

<sup>90</sup> See the statement of India in WT/CTE/M/23, paragraph 27.

<sup>91</sup> See, for instance, the statement by the United States in WT/CTE/M/5, paragraph 109, and the remarks by the EC in WT/CTE/M/26, paragraph 104.

<sup>92</sup> See Van Calster (2000), p. 313, and Pons (2002), p. 26.

tion, but no agreement could be reached between the members.<sup>93</sup> It is thus still unclear whether the term 'standard' in the TBT (and similarly, in the GPA) includes non-product related PPMs and eco-labels based on them, and it is therefore also still unclear whether the TBT applies to them.

If the TBT were to apply to eco-labelling schemes based on non-product related PPMs, this would mean that certain requirements contained in the Agreement would have to be met. These include the pursuit of a legitimate objective recognized by the TBT Agreement (these objectives include the protection of the environment)<sup>94</sup>, and adherence to the Code of Good Practice of the TBT. This Code includes provisions for increasing transparency<sup>95</sup> and enhancing participation<sup>96</sup>.

If eco-labelling schemes based on non-product related PPMs fall outside of the scope of the TBT, their legality has to be examined in the light of the GATT 1994 provisions.<sup>97</sup> Certain (developing) countries claim that these eco-labelling schemes would violate GATT provisions. According to these countries, distinctions based on PPMs that are not incorporated in the product would amount to discrimination of 'like products', and would therefore violate the non-discrimination provisions of Article I and III of the GATT.<sup>98</sup> There is a discussion in literature whether the GATT makes a product/process distinction (i.e. whether the use of trade-restricting measures based on non-product related PPMs are allowed under GATT).<sup>99</sup> It is widely thought that the GATT makes indeed such a distinction.<sup>100</sup> This does, however, certainly not make these measures incompatible with the GATT completely. They may be upheld through the general exception of Article XX.<sup>101</sup> It is important that the measures fulfil the requirements of the general exception. These requirements will be discussed in the next chapter under the condition that they are applicable to the general exception of the GPA.

Another discussion related with aspects of market access, concerns issues of transparency in the development of eco-labelling criteria. Despite the fact that it is still unclear which WTO rules apply to eco-labelling criteria, there have been some efforts to enhance transparency.<sup>102</sup> In its 1996 Report to the Singapore Ministerial Conference, the

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<sup>93</sup> See Pons (2002), pp. 23-26, where he describes proposals of Canada, and a proposal by the EC, which were subsequently rejected.

<sup>94</sup> Article 2.2 TBT.

<sup>95</sup> For example, the publication of work programmes containing information about the standards they are currently preparing and the standards which it has adopted in the preceding period (provision J), and providing copies of draft standards on request to interested parties (provision M).

<sup>96</sup> For example, allowing interested parties a certain period for the submission of comments on draft standards (provision L).

<sup>97</sup> See Van Calster (2000), p. 333.

<sup>98</sup> See Pons (2002), p. 30. Van Calster (2000), p. 335 notes that violation of the MFN requirement of Article I GATT would be difficult to prove.

<sup>99</sup> See for a good reflection on this discussion the article of Howse and Regan (2000), who criticize this distinction, and the comments of Jackson (2000) on this article.

<sup>100</sup> See Howse and Regan (2000), p. 251.

<sup>101</sup> See Pons (2002), p. 36.

<sup>102</sup> See, for instance, the United States proposal regarding further work on transparency of eco-labelling, WT/CTE/W/27.

CTE stated that “without prejudice to the views of WTO members concerning the coverage and application of the TBT Agreement to certain aspects of such voluntary eco-labelling schemes/programmes and criteria, i.e. those aspects concerning non-product-related PPMs, and therefore to the obligations of members under this Agreement regarding those aspects, the CTE stresses the importance of WTO members following the provisions of the TBT Agreement and its Code of Good Practice, including those on transparency. In this context, the CTE underlines the particular importance of ensuring fair access of foreign producers to eco-labelling schemes/programmes.”<sup>103</sup> This emphasizes the consensus that exists among members regarding the need of increasing transparency, even in the absence of agreement on the applicable WTO rules. One example of this consensus is that eco-labelling schemes are now increasingly being notified, even when they contain non-product related PPM criteria.<sup>104</sup>

### 3.4 Indications for negotiations on government procurement

In general, it can be observed that the environment has increasingly received attention within all kinds of disciplines of the WTO. It is therefore not unreasonable to assume that attention will be paid to the issue of green public procurement issues within the WTO in the future. This could take place in discussions in the Committee on Government Procurement, or in the multilateral negotiations on transparency in government procurement and on government procurement of services<sup>105</sup>. Also, it is suggested here that the GPA should be subject to an environmental review by one its parties.

In particular, the development of the PPM and eco-labelling debate within the CTE and the CTBT could set an example for possible subsequent negotiations on the permissibility of technical specifications containing references to environmental non-product related PPMs under any WTO government procurement regime. Although in the discussions and negotiations between 1994 and 2002 no agreement has been reached on several matters (coverage of the TBT; status of non-product related PPMs in the GATT), it seems that the tensions between WTO members (mainly between developing and developed countries) can be at least partly resolved by increasing transparency and the participation of foreign stakeholders in the development of eco-labelling criteria. As stated before, the CTE called upon WTO members to follow the provisions of the TBT and the Code of Good Practice. Through increased transparency and participation foreign suppliers are better able to know which criteria to rely on. This may reduce potential trade impacts of these criteria.<sup>106</sup>

The present disagreement on various issues in the discussions within the CTE and CTBT has the consequence that indications for the direction in which government procurement regulations of the WTO is heading are ambiguous. The only indications are given by the increasing emphasis that has been put on transparency and participation of foreign stakeholders in the development of eco-labels. This implies that reference in technical specifications to eco-labels developed in a transparent manner, with participation of foreign

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<sup>103</sup> See WT/CTE/1, paragraph 184.

<sup>104</sup> See Van Calster (2000), p. 333.

<sup>105</sup> One could think of procurement of environmental services as subject of these negotiations.

<sup>106</sup> See OECD (1999), p. 14.

producers will be less debated than technical specifications that refer to ‘national’ eco-labels, because the former potentially have fewer impacts on international trade.

Further negotiations on labelling schemes for environmental purposes were called for in the Doha Ministerial Declaration.<sup>107</sup> In the same Declaration, negotiations on Transparency in Government Procurement were being called for.<sup>108</sup> It is not unthinkable that in one of these negotiations, the link between eco-labelling and procurement will be made once more. Hopefully, this ends in a more substantial debate. Until that time, it should not be concluded that trade measures of governments based on non-product related PPMs are by definition impossible under the WTO Agreements. On the contrary, it should be clear that nowhere in the WTO Agreements non-product related PPMs or eco-labelling schemes based on them are prohibited. The question is just to what extent the WTO allows for them. Even if referring to non-product related PPMs would be in violation of the WTO rules, measures based on them could possibly fall within the general environmental exception, provided that they fulfil certain requirements. This leaves ample room for public purchasers to refer to them.

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<sup>107</sup> See WT/MIN(01)/DEC/1, paragraph 32 (ii).

<sup>108</sup> *Ibid.*, paragraph 26.



## 4. The general exception of the GPA and environmental gains

### 4.1 Introduction

The application of environmental criteria in procurement processes is in general allowed by the WTO rules on government procurement, provided that the two main principles of the WTO procurement regime, transparency and non-discrimination are respected. However, it is still ambiguous whether the use of non-product related PPMs is in violation of trade rules.

Both the General Agreement on Tariffs and Trade (GATT) and the GPA contain general exceptions, which can be invoked when a violation of certain provisions of the respective agreements has been found by a WTO review body. The environmental exception of Article XXIII GPA can for example be invoked when a procuring entity refers to environmental criteria in the technical specifications, which a WTO Panel deems to be “unnecessary obstacles to trade” (Article VI GPA).<sup>109</sup> It should be remembered that the scope of the GPA is limited, and that therefore a violation cannot be found if the purchase is outside the scope of the agreement.<sup>110</sup>

It can be questioned to what extent environmental benefits of green government purchasing can be taken into account if the exception of Article XXIII is invoked. This chapter will discuss in what way the environmental benefits can be weighed against their trade effects under this exception. In determining this, I will examine case law of the WTO Panel and Appellate Body.<sup>111</sup> Because there has not been any case law relevant for green government procurement in the context of the GPA yet, I will examine the case law related to the environmental exception of Article XX (b) of the GATT. Before doing that, the similarities between the environmental exceptions of the GATT and the GPA will be discussed below.

### 4.2 The exceptions of the GPA and the GATT

With regard to environmental issues, the similarities between the texts of the general exception of the GATT, Article XX, and the general exception of the GPA, Article XXIII, should be recognized.

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<sup>109</sup> It has been argued by several authors that it is hard to imagine how procurement can be considered to constitute an “unnecessary obstacle to trade” and at the same time is considered to be “necessary”, which is a requirement of the environmental exception) These authors, however, also point out that the fact that there is such an exception implies that there are such cases. See Buck and Cameron, pp. 22-23, and Van Calster, p. 304.

<sup>110</sup> See Buck and Cameron (1999), p. 23.

<sup>111</sup> Most WTO disputes from 1994 on can be found on the WTO website, at: [http://www.wto.org/english/tratop\\_e/dispu\\_e/dispu\\_e.htm#disputes](http://www.wto.org/english/tratop_e/dispu_e/dispu_e.htm#disputes), accessed on 31 March 2003.

*Box 4.1 Environmental exceptions of the GATT and the GPA.*

The introductory clause, or ‘chapeau’ of Article XX GATT reads:

“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 this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:”

Article XX (b) reads:

“(b) necessary to protect human, animal or plant life or health;”

Article XXIII (2) of the GPA reads:

“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 this Agreement shall be construed to prevent any Party from imposing or enforcing measures: necessary to protect [...] human, animal or plant life or health [...].”

On the basis of these textual similarities I will assume that the environmental exception of Article XXIII can be applied in an equal way as Article XX (b) GATT.<sup>112</sup> This would imply that the requirements, which have been developed in the WTO case law with regard to Article XX of the GATT, have to be met in order to invoke the environmental exception of the GPA successfully. These requirements will be described in section 4.2.

It can be noted that the other ‘environmental’ exception of Article XX (g) GATT does not have an equivalent in the GPA. Article XX (g) of the GATT provides for an exception for measures “relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption”. The ‘relating to’ test of Art. XX (g) GATT is considered to be more flexible than the ‘necessary’ test of Art. XX (b) GATT. It is not clear why the other environmental exception has not been inserted in the GPA.<sup>113</sup> If it would be inserted, there

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<sup>112</sup> See Arrowsmith (2003), p. 144. See also Spennemann (2001), p. 88. This view is, however, not shared by Kunzlik (1998), p. 207, who argues that the exception “is not intended to preserve the rights of entities to adopt specifications etc. having an environmental justification but [...] to preserve the right of the states party to the GPA to take and enforce mandatory “measures” [...] which might otherwise be considered to infringe the GPA”. McCrudden (1999), p. 43, while discussing the ‘public morals’ exception of Article XXIII GPA, argues on the other hand that the GPA exception can be invoked to defend measures on sub-federal level.

<sup>113</sup> One author notes that the omission of the exception of Article XX (g) provides support for the contention that the GPA is more economically oriented than the other WTO Agreements. See Charro (2003), footnote 35.



could arguably be more opportunities to invoke the exception for procurement measures based on environmental considerations.<sup>114</sup>

### 4.3 Requirements of the general exception of the GATT

A party wanting to successfully invoke Article XX (b) needs to prove that:

1. “the *policy* in respect of the measures for which the provision was invoked fell within the range of policies designed to protect human, animal or plant life or health;
2. the inconsistent measures for which the exception was being invoked were *necessary* to fulfil the policy objective; and
3. the measures were applied in conformity with the requirements of the *introductory clause* of Article XX.”<sup>115</sup>

Usually, the first requirement does not cause any problems for the party invoking the exception.<sup>116</sup> In several cases under the WTO, the policy in question was within the policies mentioned under Article XX (b).<sup>117</sup>

The second requirement of ‘necessity’, however, is more controversial. It was determined by the WTO Panel in *Thailand – Cigarettes* that ‘necessary’ means that there is no GATT-consistent or less GATT-inconsistent measure reasonably available to pursue the policy objective (‘the least-trade restrictiveness’ test).<sup>118</sup> It seems, however, that there has been a change in the interpretation of the ‘necessity’ requirement, in that it has evolved from a least-trade restrictive approach into a less-trade restrictive one, supplemented by a proportionality test.<sup>119</sup> The Appellate Body in *EC – Asbestos* stated that “WTO members have the right to determine the level of protection of health that they consider appropriate in a given situation”.<sup>120</sup> Members are not required to apply (less trade restrictive) measures that do not achieve the same level of protection.<sup>121</sup> It is however up to the WTO review body to determine whether an alternative measure, which indeed achieves that same level of protection, is reasonably available.<sup>122</sup>

The determination of this involves “a process of weighing and balancing a series of factors”. These factors include the following:

1. The contribution of the measure to the policy pursued;

<sup>114</sup> However, Article XX (g) GATT also requires that the “measures are made effective in conjunction with restrictions on domestic production or consumption”, whereas Article XX (b) does not impose such an extra condition. See Wiers (2002), p. 188.

<sup>115</sup> See *US – Standards for Reformulated and Conventional Gasoline (US – Gasoline)*, Panel Report, WT/DS2/R, paragraph 6.20.

<sup>116</sup> See Wiers (2002), p. 184. Wiers notes that, although the necessity of a certain measure to achieve a certain policy goal is checked, the necessity of the policy goal itself is not checked.

<sup>117</sup> See *Thailand – Restrictions on the Importation of Cigarettes (Thailand – Cigarettes)*, Panel Report, BISD 37S/200, paragraph 73.

<sup>118</sup> *Ibid.*, paragraphs 74-75.

<sup>119</sup> See WT/CTE/W/203, paragraph 42.

<sup>120</sup> *EC – Measures Affecting the Prohibition of Asbestos and Asbestos Containing Products (EC – Asbestos)*, Appellate Body Report, WT/DS135/AB/R, paragraph 168.

<sup>121</sup> See Arrowsmith (2003), p. 145.

<sup>122</sup> See, for instance, *EC – Asbestos*, Appellate Body Report, paragraph 172.

2. The importance of the common interests or values protected;
3. The accompanying impact on trade.<sup>123</sup>

Ad 1. The Appellate Body in *Korea – Beef* stated that “[t]he greater the contribution, the more easily a measure might be considered to be ‘necessary’”.<sup>124</sup>

Ad 2. The Appellate Body in *EC – Asbestos* stated that “[t]he more vital or important [the] common interests or values” pursued, the easier it would be to accept as ‘necessary’ measures designed to achieve those ends.”<sup>125</sup> Furthermore, it stated that the value pursued - the preservation of human life and health – “is both vital and important in the highest degree”.<sup>126</sup>

Ad 3. In *Korea – Beef*, the Appellate Body also stated that “[a] measure with a relatively slight impact upon imported products might more easily be considered as ‘necessary’ than a measure with intense or broader restrictive effects”.<sup>127</sup>

If the WTO review body determines on the basis of these factors that no alternative measure is reasonably available, the ‘necessity’ requirement will be fulfilled.

The third requirement for successfully invoking the environmental exception of the GATT is given by the chapeau (the introductory clause) of Article XX. The chapeau is intended to prevent abuse of the general exceptions.<sup>128</sup> Three subrequirements must be satisfied to pass the test of the chapeau. The first two subrequirements are that the measure applied may not be a means of arbitrary or unjustifiable discrimination. The last requirement is that the measure may not constitute a disguised restriction on international trade.<sup>129</sup> The Appellate Body in the *US – Shrimps* case pointed out what was meant by ‘unjustifiable’. Firstly, it noted the importance of international negotiations with all interested parties.<sup>130</sup> Secondly, it stated that the measure also needed to show flexibility in its application, i.e. that it has to “take into account the different situations which may exist in the exporting countries”.<sup>131</sup> The Appellate Body in the same case also gave guidance on the meaning of ‘arbitrary’. It stated that the requirements of the chapeau related to arbitrary discrimination were not met, due to “a single, rigid and unbending requirement” of the US. The Appellate Body concluded that “rigidity and inflexibility” constituted arbitrary discrimination.<sup>132</sup> The prohibition of arbitrary discrimination also entails

<sup>123</sup> See *EC – Asbestos*, Appellate Body Report, paragraph 172, and *Korea – Measures Affecting Imports of Fresh, Chilled, and Frozen Beef (Korea – Beef)*, Appellate Body Report, WT/DS161,169/AB/R, paragraph 164.

<sup>124</sup> *Korea – Beef*, Appellate Body Report, paragraph 163.

<sup>125</sup> *EC – Asbestos*, Appellate Body Report, paragraph 172, referring to the Appellate Body Report in the *Korea – Beef* case.

<sup>126</sup> *Ibid.*

<sup>127</sup> *Korea – Beef*, Appellate Body Report, paragraph 163.

<sup>128</sup> See *US – Gasoline*, Panel Report, paragraph 6.20.

<sup>129</sup> See *US – Import Prohibition of Certain Shrimp and Shrimp Products (US – Shrimps)*, Appellate Body Report, WT/DS58/AB/R, paragraph 150.

<sup>130</sup> *Ibid.*, paragraph 166. See also *Implementation in United States – Import Prohibition of Certain Shrimp and Shrimp Products (US – Shrimps (Article 21.5))*, Panel Report, WT/DS58/RW, paragraphs 5.66-5.67.

<sup>131</sup> See *US – Shrimps (Article 21.5)*, Panel Report, paragraph 5.46.

<sup>132</sup> See *US – Shrimps*, Appellate Body Report, paragraph 177.

requirements of due process.<sup>133</sup> The third requirement, finally, contains three criteria to determine ‘a disguised restriction on international trade’, which have been progressively introduced by the WTO dispute settlement system.<sup>134</sup> Basically, the ‘disguised restriction’ subrequirement attempts to prevent protectionist practices. The Panel in the *EC – Asbestos* case seems to state that there is no disguised restriction on trade, whenever a trade measure does not benefit the domestic industry to the detriment of foreign industries.<sup>135</sup>

Jurisprudence of the WTO has made it clear that the burden of proof lies with the party that asserts the affirmative of a particular claim or defence<sup>136</sup>, and that the invocation of a general exception is an assertion of an affirmative of a particular defence.<sup>137</sup> In other words, the burden of proof rests with the party that invokes an exception. In the *US – Gasoline* case, the Appellate Body found that the party invoking an exception has to prove not only that the measure inconsistent with the WTO rules falls under an exception, but also that the measure fulfils the requirements of the chapeau of Article XX.<sup>138</sup> If the party that invokes the exception gathers sufficient evidence to raise the presumption that the claim is true, the burden of proof would shift to the other party.<sup>139</sup>

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<sup>133</sup> See *US – Shrimps (Article 21.5)*, Panel Report, paragraphs 5.126-5.136.

<sup>134</sup> The first is the ‘publicity’ test, which means that a measure would probably not be a disguised restriction, if it has been published (*US – Prohibition of Imports of Tuna and Tuna Products from Canada (US - Canadian Tuna)*, Panel Report, BISD 29S/91, paragraph 4.8.). The second criterion concerns the relationship between the three criteria of the chapeau. The Appellate Body determined that disguised restriction includes arbitrary and unjustifiable discrimination, and that therefore considerations on the first two requirements of the chapeau should be taken into account in the assessment of the third requirement (see *US – Gasoline*, Appellate Body Report, WT/DS2/AB/R, p. 23). The third criterion contains a method to determine the protective nature of a measure by looking at the “design, architecture and revealing structure” of the measure (see *EC – Asbestos*, Panel report, WT/DS135/R, paragraph 8.236).

<sup>135</sup> *EC – Asbestos*, Panel Report, paragraph 8.239. A similar argument can be found in *US – Shrimp (21.5)*, Panel Report, paragraph 5.143. If the domestic industry does not benefit from a certain trade restricting measure, it is of course hard to argue that there was a protectionist motive behind the trade measure

<sup>136</sup> In other words, the party that claims something has to prove it. See *United States – Measure Affecting Imports of Woven Wool Shirts and Blouses from India (US – Shirts and Blouses)*, Appellate Body Report, WT/DS33/AB/R, p. 14.

<sup>137</sup> *Ibid.*, p. 16.

<sup>138</sup> See *US – Gasoline*, Appellate Body report, adopted on 20 May 1996, p. 22.

<sup>139</sup> See, for example, *US – Shirts and Blouses*, Appellate Body Report, p. 14. How much and what kind of evidence is required, varies from case to case. Wiers (2002), p. 223, referring to the Panel Report in the *EC – Asbestos* case, notes that the burden of proof does not mean that a party has to prove that all other possible alternatives to its measure were unfeasible.

#### 4.4 Implications of the requirements for the exception of the GPA

It is likely that the approach of Article XX GATT used in WTO disputes is also applicable to Article XXIII (2) GPA.<sup>140</sup> The requirements for successfully invoking Article XX (b) of the GATT are reiterated here:

##### *Box 4.2 Requirements*

1. Policy falls within policies designed to protect human, animal or plant life or health.
2. Measure was necessary to fulfil policy objective:
  - a. The contribution of the measure to the policy pursued;
  - b. The importance of the common interests or values protected;
  - c. The accompanying impact on trade.
3. Requirements of the chapeau:
  - a. Unjustified discrimination;
  - b. Arbitrary discrimination;
  - c. Disguised restriction of trade.

There seems no reason to assume that the first requirement would prevent procurement practices aimed at environmental protection.<sup>141</sup> For example, the panel and parties agreed in *US – Gasoline* that “the policy to reduce air pollution resulting from the consumption of gasoline was a policy within the range of those concerning the protection of human, animal and plant life or health mentioned in Article XX (b)”<sup>142</sup> This same policy objective could be pursued by the procurement of, for instance, vehicles that run on cleaner energies.<sup>143</sup> Other environmental policies pursued by (green) public procurement would most likely fall into the policies mentioned in Article XX (b) as well.

The fulfilment of the second requirement of ‘necessity’ will be harder to determine in government procurement measures. As described in the previous section, this determination involves “a process of weighing and balancing a series of factors”, including:

1. The contribution of the measure to the policy pursued;
2. The importance of the common interests or values protected;
3. The accompanying impact on trade.

Ad 1. The first factor refers to the existence of a causal connection between the procurement and the environmental policy pursued. This connection can be shown by providing evidence of a certain environmental problem and by providing evidence of the environmental relief that can be provided through procurement.<sup>144</sup> It has been argued on the basis of WTO case law that the intensity of the causal link influences the legitimacy

<sup>140</sup> See Arrowsmith (2003), p. 145.

<sup>141</sup> See Van Calster (2002), p. 304.

<sup>142</sup> See *US – Gasoline*, Panel Report, paragraph 6.21.

<sup>143</sup> See OECD (2000), p. 29-30.

<sup>144</sup> See next paragraph.

of a measure.<sup>145</sup> Therefore, if procurement of certain greener products significantly contributes to a reduction of environmental degradation, this would improve the chances that the procurement measure is regarded as necessary.

Ad 2. The second factor refers to the importance of pursuing environmental objectives. It can be argued that the protection of human life and health, a value that has been declared both “vital” and “important in the highest degree” by the Appellate Body in *EC – Asbestos*, is inherent in policies aimed at protecting the environment. If this line of reasoning is followed, procurement based on certain environmental policies stands a good chance of passing the necessity test.

Ad 3. The third factor refers to the trade impacts of the procurement. This may imply a quantification of the trade impacts of the procurement and of alternative measures.<sup>146</sup>

The third requirement of Article XXIII (2) GPA is that the application of a measure may not constitute unjustified or arbitrary discrimination, or result in a disguised restriction on international trade. As mentioned earlier, the Appellate Body in *US – Shrimps* laid emphasis on international negotiations and flexibility. This could imply that technical specifications referring to eco-label criteria that are negotiated on a global level, and which take into account multiple interests of both developed and developing countries will probably not be considered as ‘unjustified’ or ‘arbitrary’. However, it should be realized that many eco-labels are national programmes, which mainly take into account domestic preferences.<sup>147</sup> In the determination of ‘disguised restriction’, WTO case law refers to transparency, which implies that procurement that follows the specific provisions on transparency in the GPA<sup>148</sup> stand a greater chance of not being regarded as a disguised restriction.<sup>149</sup> Furthermore, if the procurement is not beneficial to the domestic industry (e.g. the specified products can only be provided by foreign suppliers), it seems likely that a ‘disguised restriction’ will not be found by a WTO review body.

#### 4.5 Weighing environmental gains under the environmental exception

In this section, I will discuss the possibilities to allow for greener public procurement based on scientific evidence. These possibilities of taking into account environmental gains are mainly given by the flexible approach towards ‘necessity’ that has been used in more recent case law. It seems that it is also possible to take into account environmental benefits in the assessment of the requirements of the chapeau.

One of the factors of determining ‘necessity’ is the causal link between the measure and the policy pursued. Scientific evidence that shows a sufficient causal link between specific public procurement behaviour and a specific environmental policy can be given by

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<sup>145</sup> See Desmedt (2001), pp. 466-467

<sup>146</sup> *Ibid.*, p. 468.

<sup>147</sup> See UNEP and IISD (2000), p. 48.

<sup>148</sup> These include provisions on time limits, publication of tender documents and decisions, and notifications of procurement regulation.

<sup>149</sup> Besides transparency, the determination of disguised restriction also depends on the outcome of the question whether the procurement decision is either unjustifiable or arbitrary. Procurement decisions that are unjustifiable or arbitrary could also be regarded as a disguised restriction.

showing the environmental relief it provides. This is an assessment where the RELIEF approach can be of importance. With the RELIEF approach, a better insight into the environmental consequences of greener purchasing can be provided.<sup>150</sup> It is now possible for a public purchaser to calculate the actual reductions in environmental impact as a consequence of green purchasing efforts.<sup>151</sup> Such evidence would certainly heighten the chances of an environmental claim under Article XXIII of the GPA. The extent to which these chances are raised is dependent on how significant the contribution is to the solution of a certain environmental problem.

It can also be argued that environmental benefits can be taken into account in assessing whether the requirements of the chapeau have been fulfilled. This has, however, not yet happened in WTO case law. In *US – Shrimps*, the Appellate Body determined that: “The policy goal of a measure at issue cannot provide its rationale or justification under the standards of the chapeau of Article XX”.<sup>152</sup> In that case it would not matter what the environmental benefits are, since the environmental objective these benefits are meant to achieve cannot provide a justification in the first place. This claim has, in my opinion rightfully, been challenged by Gaines (2001). He raised the question that if the policy underlying cannot justify a measure, what can?<sup>153</sup> The Appellate Body did not give an answer to that question.

Another way of weighing environmental gains in the chapeau could be by providing evidence that there is in fact no discrimination. ‘Discrimination’ in the introductory clause of Article XX covers both discrimination between products from different supplier countries and discrimination between domestic and imported products.<sup>154</sup> Providing evidence of the environmental benefits of the purchase of certain products compared to other products can strengthen the argument that these products are not the same and that there is therefore no discrimination.<sup>155</sup>

When determining whether a measure constitutes a disguised restriction to international trade or not, there also seem possibilities to take into account environmental gains. By showing that there are significant environmental benefits that can be attained, I think it will become less likely that the procurement measure is aimed at protecting domestic industry, although it is of course in theory possible that a measure with significant environmental benefits may indeed have protectionist motives.

It should be remembered that the evidence RELIEF is able to provide cannot reverse the finding of a violation of any WTO rules by a WTO review body. The RELIEF approach can only support the claim that the violation of the WTO rules is justified under the gen-

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<sup>150</sup> See Schmidt and Frydendal (2003), p. 22.

<sup>151</sup> Ibid., p. 23. Currently, this is only possible for certain product groups and for a limited number of environmental impact categories.

<sup>152</sup> See *US – Shrimps*, Appellate Body Report, paragraph 149.

<sup>153</sup> See Gaines (2001), pp. 777-778.

<sup>154</sup> See *EC – Asbestos*, Panel Report, paragraph 8.227.

<sup>155</sup> This possibility has been pointed out to me by Jochem Wiers. It can be noted that this discussion whether or not a measure discriminates under the chapeau of Article XX GATT is partly the same as the discussion concerning ‘like products’ under Article III GATT.

eral exception of the GPA. This support is not enough to base legal decisions on, but its use lies mainly in providing support for invoking the general exception.

#### 4.6 Some examples

This section describes the process of weighing environmental gains against trade principles with regard to three specific examples. It is stressed that this only takes place, when the environmental exception of the GPA is invoked before a WTO review body, because there is a violation of one of the specific provisions of the GPA. So I will first examine for each case whether there is indeed such a violation, and then assess whether this violation can be justified.

The three examples are:

- Wood certified by the Forest Stewardship Council (FSC);
- Regional foodstuffs;
- Green electricity.

##### FSC certified wood

Assume that reference is made in the technical specifications of a tender to the FSC certification scheme<sup>156</sup> or equivalent proof that the FSC criteria are met, in the case that a procuring entity intends to buy a wooden table made of FSC certified wood.

##### 1) *Violation of the GPA*

To determine whether this reference to a specific labelling and certification scheme is allowed, Article VI of the GPA should be examined.<sup>157</sup> Article VI determines that technical specifications “shall not be prepared, adopted or applied with a view to, or with the effect of, creating unnecessary obstacles to international trade”. Arrowsmith argues that this means at least that specifications that exclude a product or service that meets the exact functional requirements are not allowed.<sup>158</sup> However, she also mentions that it is arguable that if this happens while a procuring entity is referring to an international standard, this might not constitute an unnecessary obstacle to trade.<sup>159</sup> The question then is whether the FSC standards could be regarded as international standards. It is not clear whether this is true.<sup>160</sup>

If the FSC standards are not considered to be international ones, then the question remains whether the specifications as described above do or do not exclude products that

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<sup>156</sup> See [www.fscoax.org](http://www.fscoax.org).

<sup>157</sup> Article III (the general non-discrimination provision) could also be examined, but Article VI gives stricter rules for technical specifications. See Arrowsmith (2003), p. 313. She notes that Article VI is not limited to specifications that are less favourable to the industry of other GPA parties, but also applies if the material specified is used equally by domestic and foreign industry.

<sup>158</sup> *Ibid.*, p. 312-313.

<sup>159</sup> *Ibid.*, p. 317.

<sup>160</sup> Sørensen and Russel (1998), p. 101. Buck and Cameron (1999), p. 21, consider the FSC as a prime candidate to constitute a ‘recognized body’, which would mean that reference could be made to its standards.

meet the exact functional requirements. It has to be noted first that the specifications do not only refer to the FSC itself, but also allow for the provision of equal proof that the criteria are met. So at first sight, they do not exclude products meeting the exact same (FSC-)requirements. But there might be products that indeed meet the same functional requirements (or perform even better), but do not have the FSC certificate, or are not able to provide proof that the FSC criteria are met.<sup>161</sup>

Another question concerns the possibility to refer to criteria regarding processes and production methods (PPMs), which are not product related. Some of the FSC criteria on PPMs are indeed not related to the product. Although PPMs in general are included in Article VI of the GPA, it is still undetermined if this includes non-product related PPMs. Spennemann argues that it is more likely that the GPA does not allow for that<sup>162</sup>, but there is as yet no WTO case law to back up that claim.

From the above it cannot be concluded directly that the reference to the FSC criteria constitutes a violation of the GPA. It should first be determined whether the FSC standards can be considered as international ones or not, if they effectively exclude other products that meet the exact same functional requirements, and if non-product related PPMs are allowed under the GPA or not.

## 2) *Justification under Article XXIII GPA*

Firstly, the policy has to fall within the policies of Article XXIII. Promotion of the sustainable use of forests falls arguably within the policies designed to protect human, animal or plant life or health, and would therefore satisfy the first requirement.

Secondly, the necessity has to be assessed. In section 4.2 three factors, which are included in the determination of 'necessity', are mentioned. These are the contribution of the measure to the policy pursued, the importance of the policy, and the trade impacts. The causal link between the procurement and the policy should be shown by providing evidence of the environmental relief that can be brought by referring to the criteria of the FSC.<sup>163</sup> The importance of sustainable management of forest resources should be clear. Determining the trade impacts is not an easy thing to do, and will depend on the actual situation (will any suppliers be barred from submitting a tender?). If there are little or no trade impacts<sup>164</sup>, and there is a high causal link between the procurement and the policy pursued, it can be assumed that no alternative measure is reasonably available, and that the procurement measure will be regarded as being 'necessary'.

Thirdly, if it is assumed that referring to the FSC criteria indeed passes the necessity test, the requirements of the chapeau have to be fulfilled. The first two subrequirements deal with discrimination. The question before a WTO review body could be to what extent a procurement measure makes a difference between FSC certified tables, and tables that do

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<sup>161</sup> In practice, it is hardly possible to provide the proof that the FSC criteria are met, other than the certification itself.

<sup>162</sup> Spennemann (2001), pp. 60-63.

<sup>163</sup> Within the scope of this study it cannot be determined what the environmental gains of FSC certified forestry are.

<sup>164</sup> This could be the case when the wood used for the table would not come from regions without certifications in the first place. (e.g. there are virtually no pine wood products imported from Africa).



not have such certification. The reference to the FSC criteria applies equally to domestic and foreign suppliers of wooden tables, and does also not make a specific distinction between the foreign suppliers themselves. In the formal sense, there would therefore be no discrimination. In practice, the reference to the FSC criteria could make it impossible for some suppliers to submit a tender, if not all suppliers of wooden tables will have access to FSC certified wood. For example, there is currently no FSC certified wood available from Africa, and there are also no certification institutions present.<sup>165</sup> Whether the reference to FSC criteria constitutes a ‘disguised restriction’ is a different question. The answer to this question depends partly on possible impacts on the domestic industry. If there are relatively many domestic suppliers with FSC certification, an opponent of the measure could argue that the measure is aimed at protecting the domestic industry.

### Regional foodstuffs

Assume that a procuring entity requires that certain foodstuffs (e.g. organic milk) have to come from a supplier within a distance of 100 km.

#### 1) Violation of the GPA

Without going into much detail, it seems quite obvious that such a requirement would constitute a violation of the non-discrimination provisions of the GPA. By setting the 100 km maximum, most foreign suppliers of organic milk (that meets the exact functional requirements) would be excluded from submitting a tender, which would clearly be discriminatory, and would thus violate both Article III and Article VI (1) of the GPA.

#### 2) Justification under Article XXIII GPA

First of all, the policy should fall within the policies of Article XXIII. The environmental policy behind purchasing organic milk from within a certain region may be aimed at *inter alia* reducing transport distances and may therewith also be aimed at reducing air pollution. As seen before, this policy falls within the policies of Article XXIII. The purchasing of organic milk may also be aimed at reducing nitrate and phosphorous nutrification.<sup>166</sup> These are also policies falling under the scope of Article XXIII.

Secondly, the necessity requirement should be examined. It has to be determined what part public procurement may play in mitigating the negative environmental impacts of transport. Calculations of the RELIEF project show that the purchase of milk from within 100 km has a significant positive environmental influence.<sup>167</sup> In the RELIEF project, the environmental benefits of switching from normal to organic milk have also been calculated. The environmental relief provided by the latter significantly outweighs the environmental relief of reducing the transport distances to 100 km for most environmental problems.<sup>168</sup> The policy of reducing emissions of gases harmful to the environment should be regarded as an important policy. The requirement that the milk comes from within 100 km could be argued to have negative impacts on international trade, be-

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<sup>165</sup> However, it can be argued that the wooden tables produced in a sustainable manner differ so much from those produced unsustainably, that a reference to the FSC criteria is justified.

<sup>166</sup> See Erdmenger (2003).

<sup>167</sup> Ibid.

<sup>168</sup> Ibid.

cause it may exclude certain suppliers from submitting a tender. For instance, a milk supplier situated in a foreign country, 105 km from the procuring entity would be excluded. This makes the 100 km distance requirement arbitrary, however desirable it may be from an environmental point of view. Taking into account that trade impacts are very likely because of the distance requirement, the chances that these tender requirements will fall under the exception of Article XXIII are low.

There is no need to consider the requirements of the chapeau, since the exception itself could most likely not be invoked.

### Green electricity

Assume that a procuring entity decides to purchase only green electricity, which comes from suppliers that contribute to increased green electricity generation (i.e. fulfil the so-called additionality requirement), and who can prove this by showing that the criteria of the EUGENE<sup>169</sup> certificate are met.

#### *1) Violation of the GPA*

Again, Article VI of the GPA should be examined. The question is whether the specifications as described do or do not exclude products that meet the exact functional requirements. This seems to be the case, because electricity from different sources always has the same characteristics.

Another question that arises in this case is the possibility to refer to criteria regarding processes and production methods that are not product related. The demand that the production of green electricity must contribute to increased generation of green electricity is not product related. It was noted in the first case of the FSC certified wood that it is still undetermined whether Article VI includes non-product related PPMs. Similarly to that case, it can be argued here that reference to the criteria of EUGENE constitutes a violation of Article VI.

#### *2) Justification under Article XXIII GPA*

Again, in the first place, the policy has to fall within the policies of Article XXIII. The specific environmental policy behind this procurement preference can be fighting global warming through the reduction of greenhouse gas emissions. This policy could be argued to be a policy “designed to protect human, animal or plant life or health”.

In the second place, the necessity of demanding green electricity has to be examined. Calculations of the RELIEF project show that if public purchasers switch to green electricity, this would provide for significant reductions of greenhouse gas emissions.<sup>170</sup> The importance of the reduction of greenhouse gas emissions, and of the global warming problem, can be shown, for example, by referring to the UN Framework Convention on Climate Change Treaty (UNFCCC), concluded in 1992, which many countries in the world have ratified. As a next step, the impacts on trade should be assessed. Demanding green electricity could exclude countries that still largely produce ‘brown’ electricity.

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<sup>169</sup> See <http://www.greenelectricitynetwork.org>.

<sup>170</sup> Ibid. It is mentioned that in the European Union, 1,5% of total EU greenhouse gas emissions can be avoided in this way, whereas the obligation of the Kyoto Protocol is 8%.

Although the production of green electricity is increasing worldwide, it is not yet as widespread as 'brown' electricity. On the other hand, the additionality requirement demands that the electricity supplied must come from additional capacities of renewable energy based facilities. This is a requirement that could be fulfilled in theory by both 'brown' and 'green' electricity suppliers, so the additionality requirement does not by definition lay a heavier burden on suppliers of brown electricity. Depending on the actual level of the trade impacts, and on the environmental benefits that can be attained, the necessity of this procurement measure can be determined.

In the third place, if it is once again assumed that the 'necessity' test is passed, the requirements of the chapeau have to be met. The first two subrequirements require that the measure is non-discriminatory. Again, although the demand of green electricity does not seem to discriminate against suppliers in the formal sense, in practice this may well be the case. This would depend on the extent to which green electricity is produced in the country itself, and in other countries. It might also be unattainable in practice for certain suppliers to fulfil the criteria of the EUGENE certificate. Therefore, the demand that proof is shown that the EUGENE criteria are met could amount to unjustified or arbitrary discrimination. It can probably not be argued that discrimination is justified on the ground that green electricity differs from other electricity, since this is clearly not the case.



## 5. Conclusions and recommendations

### 5.1 Conclusions

Although at first sight the WTO certainly does not create a great barrier to green procurement, it can be observed in this study that the relationship between the WTO framework on government procurement and greener purchasing is not yet fully clarified. Some clarification might be provided through the ongoing discussions and negotiations on government procurement and on the environment, if these topics are indeed linked. It is also possible (and desirable) that the WTO itself provides more information on the relationship between procurement and the greening thereof. Something similar has already been done in the European Union, where the European Commission has issued an Interpretative Communication on the possibilities of integrating environmental consideration into procurement.<sup>171</sup>

As for weighing environmental gains against trade principles, this is possible under the GPA in the determination of the necessity requirement of Article XXIII of the GPA. However, even if on the basis of information on the environmental benefits, provided by e.g. RELIEF, a measure can be regarded as necessary, the application of the measure must still fulfil the requirements of the chapeau. As it was argued in Chapter 4, it is plausible that environmental considerations can be taken into account in determining whether the requirements of the chapeau have been fulfilled. However, there has been no case yet before a WTO review body in which environmental gains have been weighed in the chapeau, so this possibility remains unclear.

To further 'green' the WTO with regard to government procurement and to provide more clarification on the relationship between green government procurement and the WTO, some recommendations are given below for policy makers in the WTO and in its member states, as well as for researchers.

### 5.2 Policy recommendations

- Members to the GPA, including the EU and its Member States, should force the issue of the greening of government procurement on the agenda of the WTO negotiations by, for instance, linking the negotiations following the Doha Declaration on transparency in government procurement and on environmental issues in order to start a debate on green government procurement within the WTO;
- Members to the GPA, including the EU and its Member States, should undertake environmental reviews of this agreement, or should, if they undertake an environmental review of the entire WTO include a review of the GPA;
- Members to the GPA, including the EU and its Member States, should suggest in discussions on government procurement that the exception of the GPA should also accommodate the other environmental exception of Article XX (g) GATT, allowing

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<sup>171</sup> COM (2001) 274 final. For an analysis of this communication, see Fischer (2001). See also Fischer-Braams and others (2002).

exceptions “relating to the conservation of exhaustible natural resources”, and therewith allowing in theory more environmental exceptions to the GPA.;

- Members to the GPA, including the EU and its Member States, should explore the opportunities of clarifying the GPA by referring cases related to green government procurement to the review body of the WTO. This could for example clarify that environmental benefits can be taken into account in the determination of the requirements of the chapeau;
- The OECD, which has observer status in the Committee on Government Procurement, should provide the WTO with information it has gathered on green government procurement practices, to give a basis for discussions in the WTO on this topic.
- In the current review of the GPA undertaken by the Committee on Government Procurement, a more explicit mention should be made of green procurement. For that purpose, several ambiguous articles should be clarified. For example, it should be clarified if (and in the author’s opinion that) Article VI is intended to include both product related and non-product related PPMs;
- In that same review, the relationship between several provisions of the multilateral WTO Agreements and the GPA should be clarified. For example, it should be clarified whether the general exception of the GPA is indeed intended to be interpreted in a similar way as the general exception of the GATT;
- Until there is an outcome of the plurilateral and multilateral discussions on government procurement in the WTO, the Committee on Government Procurement should provide an informal note which at least addresses and recognizes issues of green procurement, in order to provide a starting point for a debate on the greening of government procurement within the WTO.

### 5.3 Research recommendations

- The opportunities that the Agreement on Government Procurement offers for green government procurement should be examined in more detail, in order to increase legal certainty. Specifically, it is desirable to examine the opportunities of green procurement by including environmental criteria in:
  - The technical specifications of a tender (by requiring, for example, that products are certified by a certain private or public eco-label, or that they comply with the criteria of such an eco-label, or by specifying certain transport-related demands);
  - The qualification criteria for suppliers (by requiring, for example, that tenderers run certain environmental management schemes);
  - The criteria for awarding a contract.
- The compatibility of actual green procurement practices within the territories of (both European and non-European) GPA members with the WTO law on government procurement should be examined in a detailed manner, in order to increase legal certainty;
- The diverging attitudes of members and non-members to the GPA (both developed and developing) countries towards green government procurement should be examined, in order to create a dialogue on green procurement between different stakeholders.

## References

- Arrowsmith, S.L. (2003). *Government procurement in the WTO*. The Hague, The Netherlands: Kluwer Law International.
- Arrowsmith, S.L., Linarelli, J. & Wallace, D., Jr. (2000). *Regulating Public Procurement: National and International Perspectives*. The Hague, the Netherlands: Kluwer Law International.
- Baroncini, E. (2002). Working paper on WTO Technical Barriers to Trade Agreement and Committee. *Sustainability labelling and certification: towards an integrated legal, economic, ecological and social approach*. Progress Report (December 2001), University of Barcelona, Barcelona, Spain.
- Blank, A. & Marceau, G. (1997). A History of Multilateral Negotiations on Procurement: From ITO to WTO. In Hoekman, B.M. & Mavroidis, P. (eds.), *Law and Policy in Public Purchasing: The WTO Agreement on Government Procurement*. (pp. 31-55). Michigan, USA: University of Michigan Press, Ann Arbor.
- Buck, M., & Cameron, J. (1999). *International Trade Law and Green Public Purchasing*. Manuscript, March 1999.
- Calster, G. van (2000). *International and EU Trade Law. The Environmental Challenge*. London, UK: Cameron May.
- Calster, G. van (2002). Green Procurement and the WTO – Shades of Grey. *Review of European Community and International Environmental Law*, 11(3), 298-305.
- Charro, P. (2003). Case C-513/99, Concordia Bus Finland Oy Ab v. Helsingin kaupunki and HKL-Bussiliikenne. *Common Market Law Review*, 40(1), 179-191.
- Desmedt, A. (2001). Proportionality in WTO Law. *Journal of International Economic Law*, 4(3), 441-480.
- Dischendorfer, M. (2000). The Existence and Development of Multilateral rules on Government Procurement under the Framework of the WTO. *Public Procurement Law Review* 9(1), 1-38.
- Erdmenger, C. (2003). The financial power and environmental benefits of green purchasing. In: Erdmenger, C. (ed.), *Buying into the environment: Experiences, opportunities and Potential of Eco-Procurement*. (pp. 118-135). Sheffield, UK: Greenleaf Publishing.
- Fischer, A. (2001). The Way towards Green Public Procurement – An Analysis of the Recent Interpretative Communication of the European Commission. *Environmental Law Network International Review*, 2(2001), 19-28.
- Fischer-Braams, Geerdink, J.H., Houten, T.O. van, Neleman, I.W., Saanen-Siebenga, N. & Tucker, A. (2002). *Pilotstudie Duurzaam inkopen en de EG-aanbestedingsrichtlijnen*. The Hague/Delft, The Netherlands: Pels Rijcken & Droogleever Fortuijn and TNO-Strategie, Technologie en Beleid. Dutch version available at: <http://www.inkopers.net>.
- Gaines, S. (2001). The WTO's Reading of the GATT Article XX Chapeau: A Disguised Restriction on Environmental Measures. *University Pennsylvania Journal of International Economic Law*, 22(2001), 739-862.
- Hoekman, B.M. (1997). Introduction and Overview. In Hoekman, B.M. & Mavroidis, P. (eds.), *Law and Policy in Public Purchasing: The WTO Agreement on Government Procurement*. (pp. 1-11). Michigan, USA: University of Michigan Press, Ann Arbor.
- Hoekman, B.M. & Mavroidis, P., (1997). Basic Elements of the Agreement on Government Procurement. In Hoekman, B.M. & Mavroidis, P. (eds.), *Law and Policy in Public Purchasing:*

- The WTO Agreement on Government Procurement*. (pp. 13-26). Michigan, USA: University of Michigan Press, Ann Arbor.
- Hoekman, B.M. & Mavroidis, P. (1997). Multilateralizing the Agreement on Government Procurement. In Hoekman, B.M. & Mavroidis, P. (eds.), *Law and Policy in Public Purchasing: The WTO Agreement on Government Procurement*. (pp. 289-312). Michigan, USA: University of Michigan Press, Ann Arbor.
- Howse, R. & Regan, D. (2000). The Product/Process Distinction – An illusory basis for disciplining “unilateralism” in trade policy. *European Journal of International Law*, 11 (2), 249-289.
- Jackson, J.H. (2000). Comments on Shrimp/Turtle and the Product/Process Distinction. *European Journal of International Law*, 11(2), 303-307.
- Kunzlik, P. (1998). Environmental Issues in International Procurement. In Arrowsmith, S.L. & Davies, A. (eds.), *Public Procurement: Global Revolution*. (pp. 199-217). London, UK: Kluwer Law International.
- Low, P.A., Mattoo, A., & Subramanian, A. (1997). Government Procurement in Services. In Hoekman, B.M. & Mavroidis, P. (eds.), *Law and Policy in Public Purchasing: The WTO Agreement on Government Procurement*. (pp. 225-242). Michigan, USA: University of Michigan Press, Ann Arbor.
- Marissing, J.P.L. van (1995). *De regelgeving voor overheidsopdrachten op het niveau van de Europese Gemeenschap en de GATT, alsmede de gevolgen hiervan voor de Nederlandse regelgeving*. Proefschrift, Rijksuniversiteit Leiden, The Netherlands.
- McCrudden, C. (1999). International Economic Law and Human Rights: A Framework for Discussion of the Legality of ‘Selective Purchasing’ Laws under the WTO Government Procurement Agreement. *Journal of International Economic Law*, 2(1) (1999), 3-48.
- Moltke, K. von (1999). *Trade and the environment. The linkages and the politics*. Available at <http://www.iisd.org/pdf/canberra.pdf>.
- Moltke, K. von (2002). *After Doha. Assessing the outcomes of the WTO Fourth Ministerial*. Available at [http://www.iisd.org/pdf/2002/trade\\_qatar\\_viewpoint5.pdf](http://www.iisd.org/pdf/2002/trade_qatar_viewpoint5.pdf).
- OECD (1999). *Trade Issues in the Greening of Public Purchasing*. COM/TD/ENV(97)-111/FINAL. Paris, France: Joint Working Party on Trade and Environment, OECD.
- OECD (2002). *The Size of Government Procurement Markets*. Paris, France: OECD.. Available at <http://www.oecd.org/pdf/M00025000/M00025999.pdf>.
- Pons, J.F. (2002). *Sustainability labelling and certification: towards an integrated legal, economic, ecological and social approach*. Working paper on the WTO Committee on Trade and Environment, Progress Report (December 2001), University of Barcelona, Barcelona, Spain.
- Reich, A. (1999). *International public procurement law: the evolution of international regimes on public purchasing*. The Hague, The Netherlands: Kluwer Law International.
- Russel, T. (ed.), (1998). *Greener Purchasing: Opportunities and Innovations*. Sheffield, UK: Greenleaf Publishing.
- Schmidt, A. & Frydendal, J. (2003). Methods to calculate the Environmental Benefit of “Green” Products. In Erdmenger, C. (ed.), *Buying into the environment: Experiences, opportunities and Potential of Eco-Procurement*. (pp. 136-165). Sheffield, UK: Greenleaf Publishing.
- Sørensen, S.Y. & Russel, T. (1999). Greener Purchasing and Trade Rules: Can they be Reconciled? In Russel, T. (ed.), *Greener Purchasing: Opportunities and Innovations*. (pp. 99-105). Sheffield, UK: Greenleaf Publishing.
- Spennemann, C. (2001). The WTO Agreement on Government Procurement – A Means of Furtherance of Human Rights? *Zeitschrift für Europarechtlichen Studien*, 4(1), 43-95.



- UNEP & IISD (2000). *Environment and Trade. A Handbook*. Winnipeg, Manitoba, Canada: International Institute for Sustainable Development.
- Van der Grijp, N. (1998). The Greening of Public Procurement in the Netherlands. In Russel, T. (ed.), *Greener Purchasing: Opportunities and Innovations*. (pp. 60-70). Sheffield, UK: Greenleaf Publishing.
- Ward, H. (1997). Trade and Environment Issues in Voluntary Eco-labelling and Life Cycle Analysis. *Review of European Community and International Environmental Law*, 6(2), 139-147.
- Wiers, J. (2002). *Trade and Environment in the EC and the WTO. A Legal Analysis*. Groningen, the Netherlands: Europe Law Publishing.
- WTO (2001). *Trading into the future*. 2<sup>nd</sup> ed. Available at [http://www.wto.org/english/res\\_e/download\\_e/tif.pdf](http://www.wto.org/english/res_e/download_e/tif.pdf).
- WTO (2002). *Background Document on Trade and Environment*. Trade and Environment Division of the World Trade Organization.