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WTO Negotiations on Environmental Goods and Services: A Potential Contribution to the Millennium Development Goals

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Note

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I. INTRODUCTION

Negotiations on Environmental Goods and Services (EGS) in accordance with Article 31(iii) of the 2001 Doha Development Agenda of the WTO[1] was expected to be a likely candidate for early or mid-term harvest: given the challenges of global environmental degradation, it was hoped that enhanced trade liberalisation in goods and services, and the dismantlement of non-tariff barriers may effectively contribute in addressing these problems. These hopes and expectations failed to materialise. Instead, EGS negotiations turned out to be one of the most difficult areas, both conceptually and in terms of interests at stake. Members of the WTO failed to agree on a shared approach to conduct these negotiations in a balanced and mutually beneficial manner. In short, technology exporting countries emphasize tariff reductions on environmental goods. Technology importing countries fear that results on tariff reductions cannot bring about a proper balance and thus pursue what is called project based or integrated approaches. Moreover, negotiations on environmental goods and services take place in different committees at the WTO. The Committee on Trade and Environment in Special Session (CTESS) is mandated to clarify the concept of an environmental good and establish a list of environmental goods, the modalities for tariff and non-tariff barriers are discussed in the Negotiating Group on Non-Agriculture Market Access (NAMA), while environmental services are under the Special Session of the Council for Trade in Services. The very structure of negotiations has rendered a comprehensive and integrated approach practically impossible.

Negotiations, so far, have mainly focused on improving market access for goods supporting the environment and its sustainable use. Little attention has been paid to services and to the removal of non-tariff barriers, in particular technical barriers to trade and problems relating to subsidisation. The state of play may be roughly characterised by essentially the following main models and proposals:

1. Negotiating and defining a *list of industrial products* with a view to lower or eliminate tariffs, which amount to relevant technology input in environmentally relevant fields such as sewage, clean water, climate change, noise abatement, renewable energy etc. This approach has been essentially submitted by industrial countries, based upon lists prepared by OECD and APEC.[2]
2. Negotiating and defining a *list of environmentally preferable products (EPPs)* with a view to lower or eliminate tariffs. These are products which, by way of their nature or method of production, are beneficial to sustainable development and ecology. Such products include non-timber forest products, jute, coir, eco-labelled products, and organic agricultural products, bio fuels, such as ethanol and bio diesel. This approach has been essentially submitted by a number of developing countries, based upon a list prepared by UNCTAD.[3] It is equally endorsed in proposals submitted by industrialised countries.[4]
3. *The Environmental Project Approach* (EPA) extends to goods and services and envisages to

[1] The Doha Development Agenda sets ambitious goals for negotiations on trade and environment. Paragraph 31 of the 2001 Ministerial Declaration, confirmed by the 2005 Hong Kong Ministerial declaration, defines the agenda as follows:

31. With a view to enhancing the mutual supportiveness of trade and environment, we agree to negotiations, without prejudging their outcome, on:

(i) The relationship between existing WTO rules and specific trade obligations set out in multilateral environmental agreements (MEAs). The negotiations shall be limited in scope to the applicability of such existing WTO rules as among parties to the MEA in question. The negotiations shall not prejudice the WTO rights of any Member that is not a party to the MEA in question;

(ii) Procedures for regular information exchange between MEA Secretariats and the relevant WTO committees, and the criteria for the granting of observer status;

(iii) The reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services.

Available at http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm

[2] E.g. Submission by the United States, TN/TE/W/52 T, TN/MA/W/18/Add.7, 4 July 2005; Submission by the European Communities, TN/TE/W/56, 5 July 2005.

[3] See Sandreep Singh, Environmental Goods Negotiations: Issues and options for ensuring win-win outcomes, International Institute for Sustainable Development, June 2005 (www.iisd.org).

[4] E.g. Submission by Switzerland, TN/TE/W/57, 6 July 2005.

extend market access facilitation during the construction and realization of specific products, essentially defined by national governments within parameters to be discussed by the WTO Committee on Trade and Environment Special Session (CTESS). This approach was primarily submitted by the Government of India.[5]

4. The *Integrated Approach* (IA) proposed by originally Argentina combines elements of both the list and EPA approaches. Categories of environmental projects to be identified by the CTESS will include a list of goods applicable for national projects that would be eligible for preferential access during the project period.[6] Uruguay suggested defining environmental activities of concern to Members in order to provide an appropriate framework.[7] In a subsequent joint proposal by Argentina and India, explicit and indicative reference was made to specific activities and linked to the activities of public and private entities in these fields.[8]

Up to July 2007, Members of the WTO failed to agree on a common approach and methodology to EGS negotiations. Despite pressing ecological challenges, economic and commercial interests largely diverge. Most of the advanced and relevant technology still is with developed countries, who share an interest to improve market access conditions. On the other hand, developing countries, often dependent on tariff revenues, seek to preserve adequate policy space and assurance that results will take into account environmentally friendly natural products in which they have a distinct advantage. The list approach is considered one-sided, favouring the interests of the advanced WTO Members, essentially amounting to a sub-category of Non-Agricultural Market Access (NAMA) negotiations. It also poses a problem of dual use of goods. The EPP approach shares basic objections to the list approach, albeit it offers a balance of interests. The EPA approach is questioned on a number of grounds: unilateral projects can be undertaken at any time and do not offer true commitments in WTO terms. Moreover, they are of a temporal nature and lacks predictability, thus raising a number of legal issues in WTO law. The integrated approach offers new ground and the potential to combine what has been tabled by WTO Members so far.

The present paper assesses recent developments in negotiations and offers a critical analysis. It seeks to develop alternative avenues and methods for the conduct of future negotiations in the field. It suggests establishing strong linkages between the UN Millennium Development Goals and EGS negotiations – linkages which so far has not directly materialised both in terms of methodology and substance. The linkage leads to what we call the method of Environmental Area Initiatives (EAI). It is submitted that the pursuit of EAIs in coming years under an agreed and negotiated framework will allow to reduce current complexities, and to embark upon an ongoing process which no longer inherently depends upon trade rounds and overall package deals.

In setting the stage, we begin with a characterisation of the environmental industries at stake and definitional issues in Chapter II. Both are necessary requirements for the following legal assessment of existing proposals and approaches in Chapter III to V. Chapter VI builds upon the idea of an integrated approach. It seeks to establish appropriate linkages with other areas under negotiations equally supportive of the Millennium Development Goals, in particular negotiations on intellectual property. Chapter VII seeks to combine the results of preceding chapters, setting out possible options for common ground for negotiations ahead. It sets out to develop the concept of Environmental Area Initiative (EAI) as an alternative approach. Chapter VIII examines water services as an illustration of the linkage between accomplishing trade objectives and the attainment of pertinent MDGs. Chapter IX offers a summary and conclusions.

5 Submission by India, TN/TE/W/54, 4 July 2005.
6 Submission by Argentina, TN/TE/W/62, 14 October 2005.
7 Submission by Uruguay, JOB (06)/44.
8 Submission by Argentina and India, JOB (07)/77 of June 6, 2007.

II. SETTING THE STAGE

A. Profiling the global environmental industry

The global environment industry stood at US$563 billion in 2002 and estimated to exceed US$ 600 billion by 2010. The US, EU and Japan alone account for 85 percent of this market. Environmental services make up 65 percent of the industry, and of this, 80 percent is attributed to water, sewage, and solid waste management.[9] The market is dominated by a few large multinationals in the waste and water management sector, and a large number of small and medium-sized companies, many in developing countries, in solid waste management.

Among these services, water supply and treatment, and waste management have a strong public service component to them. Governments have traditionally been the sole providers of these services through monopoly public utilities or through concessions to exclusive private suppliers but in recent years, involvement of private sector has been increasing.[10] Privatisation and deregulation policies have greatly encouraged this trend. The current share of private sector, though, is relatively low at 5 percent, but is expected to exhibit continuous growth.

Industry sources estimate the global industry to have grown by 4 percent in 2000. Demand, however, in developed countries has since stabilised as punitive regulatory systems implemented in previous years become successful in bringing major polluting industries into compliance thus marking a shift in focus from regulation, compliance and enforcement to use of policy instruments emphasizing sustainability.[11] Future global demand is expected to be driven by developing countries and transition economies, growing at an annual rate of 8 to 12 percent.[12]

UNCTAD estimates based on the OECD and APEC lists show that developed economies dominate both the export and import markets for environmental goods. In 2000, developing countries exported 16 percent of the global total, and accounted for 32 percent of overall imports. An overwhelming 82 percent of these imports come from developed countries; however, this dependence is starting to decrease. This is offset by developing country exports to other developing countries which are substantial, at 42 percent. The top developing country exporters in 2000 are China, Mexico, Singapore, Republic of Korea, Malaysia, Brazil, Thailand, and Indonesia, and India whose cumulative total account for 90 percent of developing country exports. Examples of goods for which developing countries are net exporters include electric space heating and soil heating apparatus, fluorescent lamps, mats and screens of vegetable materials, instantaneous or storage non-electric water heaters, hydrated lime, among others.[13] In terms of tariffs, developing countries still have relatively high levels. [14]

Relative to other industries (such as computer and related services), environmental services are not made up of a discrete set of related activities. Even in the same sub-sector, technologies used and expertise required differ widely (as in the case of hazardous waste differing from the handling of municipal or solid waste).[15] This feature of the industry gives rise to a major problem of classification, to be discussed below.

Moreover, environmental goods are increasingly integrated with services, where materials are provided together with the expertise, either “horizontally” where firms work on an entire project for a particular medium, e.g. air, water, or “vertically” where firms specialize in a specific area across different media.[16]

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9 Grosso (2005).
10 OECD (2001).
11 Ferrier (2003).
12 Hamwey (2003).
13 UNCTAD (2003).
14 End-Uruguay weighted average tariff levels for environmental goods for groups of countries are (in ad valorem percentage): 3.1 for all high-income countries, 15.6 for low and middle-income countries and 51.1 for least developed countries (Kennett and Steenblik, 2005).
15 Steenblik (2005).
16 OECD (2001).

The ability to respond effectively to environmental problems is increasingly dependent on making available environmental services and goods in an integrated manner.[17]

In terms of mode of supply, most trade in environmental services occur through GATS mode 3 (commercial presence) and mode 4 (movement of natural persons).

Thirty-nine (39) Members have made commitments on environmental services under the GATS. Specific commitments are as follows: for sewage services, 29 commitments; for refuse disposal services – 30 commitments; for sanitation and similar services – 31 commitments; and for other services – 28 commitments.[18] Within the negotiations (as of 2006), 21 Members have submitted their offers to make new or improved commitments in environmental services. Of this number, 13 are developing country Members.[19]

B. Definitions and classifications

The decision on an approach to the EGS negotiations that has so far dodged the CTESS discussions merely reflects the lack of consensus on definitional issues. What an environmental goods and services industry is has evaded precise definition until now, so that attempts at definition in present literature constitute largely of lists of what the industry comprises. This conceptual difficulty reflects the nature of an industry characterised by a complex heterogeneity of goods and services, and whose boundaries are continually expanding in response to increasing regulation and technological developments.

The OECD/Eurostat Informal Working Group in 1998 defined the EGS industry as "*consist(ing) of activities which produce goods and services to measure, prevent, limit minimise or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco-systems. This includes cleaner technologies, products and services that reduce environmental risk and minimise pollution and resource use."*[20]

1. Environmental goods

In the ongoing CTESS negotiations, proposed lists of environmental goods include products falling under two (2) general categories: those which include manufactured goods used directly in the provision of environmental services (such as valves, pumps, compressors) , and those industrial and consumer goods not primarily used for environmental purposes but whose production, end-use and/or disposal have positive environmental characteristics relative to similarsubstitute goods, or what is referred to as environmentally preferable products (EPPs) such as organic cultural products and biodegradable natural fibres.[21]

Several issues remain outstanding in the debate of determining what is an environmental good – that of dual use, the moving standard of what constitutes "cleaner" technologies and goods as a result of continuous technological improvement and innovation (what is considered environmentally superior is relative in time), and whether goods produced using "cleaner" processes should be considered environmental.

2. Environmental services

As in environmental goods, environmental services equally suffer from a definitional problem. The classification of environmental services is a subject that has preoccupied institutions (OECD, UNCTAD, APEC) and countries alike since the mid-1990s when the industry structure started to evolve as a response to regulatory requirements, consumer demand, and technology developments. Initially, environmental services was understood to refer mainly to facilities providing water and waste-treatment

[17] Some examples of environmental sub-sectors and corresponding goods and services include: waste and wastewater treatment requiring membranes, chemical dosing, pipes and ranks (products), and turnkey contracts (services); waste management requiring landfill liners and composters (products), and collection and disposal (services).
[18] Zarrilli (2003).
[19] Kirkpatrick (2006).
[20] Steenblik (2005).
[21] Hamwey (2005).

services. Since two decades ago, this has expanded to services which can be subdivided into two distinct types: infrastructure environmental services, non-infrastructure environmental services (e.g. air pollution control), and environment-related support services (e.g. environmental consultancy)[22]

Commitments in environmental services are made under the GATS and follow the WTO Services Sectoral Classification List, also known as W/120, which is based on the UN Provisional Central Product Classification (CPC) system. This is not an exclusive requirement as Members are also free to make their own sectoral classification, so long as sufficiently detailed definition is provided in order to avoid ambiguity in terms of the scope of the commitment.[23] The W/120 classification for environmental services covers the following: (1) sewage services; (2) refuse disposal services; (3) sanitation and similar services; and (4) other environmental services (cleaning services for exhaust gases, noise abatement services, nature and landscape protection services, and other environmental services not elsewhere classified).[24]

The W/120 list, drawn up in 1990-91, reflects the traditional view of environmental services as public infrastructure services limited to waste management and pollution control. In particular, the classification suffers from problems arising from "dual use" where some types of environmental services overlap with services classified within other services sectors[25], lack of organization in terms of services for specific environmental media (water, soil, air, noise), and its coverage being narrowly defined as traditional "end-of-pipe" services. Moreover, as it stands, the classification is no longer sufficient to cover the range of environmental services that have evolved resulting from the expansion of industry from "end-of-pipe" technologies to prevention and cleaner processes and products, regulatory requirements, as well as the increasing trend of private sector involvement in the delivery of environmental services formerly handled solely by public entities. The negotiating proposals on environmental services on the table call for revised classification with new categorizations that aim to better reflect the present characteristics of the industry and include new dimensions of environmental challenges that it faces.[26]

22 Kirkpatrick (2006).
23 Steenblik et al (2005).
24 MTN.GNS/W/120 (10 July 1991).
25 Such as construction, engineering, consulting, and technical analysis services.
26 Proposals from Australia (S/CSS/W/112, 01 October 2001), Switzerland (S/CSS/W/76, 04 May 2001), EC (S/CSC/W/25, 28 September 1999).

III. CONCEPT OF LISTING ENVIRONMENTAL GOODS FOR TARIFF REDUCTIONS OR ELIMINATION

The approach tabled by developed countries listing environmental goods based upon the OECD and APEC listing responds to the principles and procedures of multilateral tariff negotiations in WTO. The same holds true for submissions focusing on Environmentally Preferable Products (EPP) tabled by developing countries with a view to bring a somewhat balanced results. Given the structure of the industry and a predominant position of industrialised countries in environmentally relevant technology, it is difficult to establish an appropriate balance within EGS negotiations per se. In legal terms, the list approach is fully compatible with WTO law, and need not further discussion. It reflects traditional modes of tariff negotiations in the WTO. From a practical point of view, this approach can be readily implemented.

While the list of goods implicitly addresses, and is concurrent with, the MDGs, it does not focus on particular sectors. It does not seek to support specific goals. The approach is mainly driven by export interests. Moreover, the approach fails to link negotiations on environmental goods with those on environmental services in a systemic way. Both are dealt with in separate fora, short of co-ordination on the international level with a view to achieve coherent targets and goals. Finally, the approach fails to respond to the mandate of Article 31(iii) DDA which includes services and non-tariff barriers. Problems relating to subsidies and to technical barriers to trade are difficult to address short of defining more specifically targets and sectors to be addressed in negotiations. In conclusion, the list approach, while fully compatible with WTO law, fails to establish an appropriate balance between developed and developing countries in light of the structure of the environmental industry discussed above. It does not target specific sectors and thus renders consensus on specific products listed difficult to achieve in a balanced and reciprocal manner.

IV. CONCEPT OF ENVIRONMENTAL PROJECTS AND THE INTEGRATED APPROACH

The EPA concept submitted by developing countries, in particular India and Argentina, links temporal reduction or elimination of tariffs in goods and enhanced market access in services to governmental programs and actions in the field of environmental policies. Goods and services essential for the implementation of the program shall be included and qualify for reduced or eliminated barriers to trade. Partly, it is suggested to define relevant goods and services unilaterally. The WTO would define the pertinent criteria under which domestic authorities would operate (India). Partly, it is suggested to have projects defined by the CTESS in the WTO and thus multilaterally (Argentina). Partly, relevant goods and services should be strictly limited to environmental purposes, at the exclusion of dual use goods (Colombia). Partly, it is suggested to exclusively link goods and services to Multilateral Environmental Agreements (Uruguay, Qatar).

A. Proposals

The following excerpts and summaries of main proposals recall the main tenets.

1. India and Argentina

India and Argentina both tabled related initial proposals, essentially relying upon the definition of national environmental projects as a basis for enhanced market access. While India left the definition of projects to a national authority, Argentina reinforced the multilateral approach by identifying project areas and links them to a list of goods, thus seeking an integrated approach.

India defined the EPA concept as follows:[27]

> In view of the issues involved in the "List Approach" for environmental goods, an alternative approach is proposed, i.e. the "Environmental Project Approach". This approach would address diversity in environmental standards with common but differentiated responsibilities and would bring in trade liberalization to meet the environmental as well as development goals of both the Doha Development Agenda and Agenda 21. Under this approach, a project, which meets certain criteria, shall be considered by a Designated National Authority (DNA). If approved, the goods and services included in the project would qualify for specified concessions for the duration of the project.
>
> The projects would be decided by the DNA and could include those aimed at meeting national environmental objectives as well as objectives of any bilateral or multilateral environmental agreement. They would include, *inter alia*, equipment, parts and components, consumables, services, investment, financial aid and transfer of technology. The commitments that Members agree to undertake may include (a) reduction or elimination of tariffs on import of all project related goods; (b) reduction, elimination or appropriate treatment of standards, licensing restrictions, non-tariff barriers and other related issues; (c) specific commitments required in all modes of service delivery.
>
> The broad criteria for "environmental projects" could be agreed upon in the CTESS with due consideration to the policy space of national governments. The projects may, among others, include: Air Pollution Control; Water and Waste Management; Solid Waste Management; Remediation and Clean-up; Noise and Vibration Abatement; Environmental Monitoring and Analysis; Process Optimization; Energy Saving Management; Renewable Energy Facilities; and Environmentally Preferable Products.

[27] TN/TE/W/51, 3 June 2005.

Argentina was equally critical of the lists approach and observed, at the same time, that the project based approach submitted by India lacks multilateral disciplines. It can be unilaterally implemented already today. Argentina therefore submitted an Integrated Approach, combining EPA and the list approach:[28]

The CTESS should identify "the categories" of environmental projects, such as: air pollution control; water and waste water management; soil and soil conservation; solid waste management; remediation and clean up; noise and vibration abatement; environmental monitoring and analysis; process optimization; energy saving management; renewable energy; and environment-friendly products."

The following principles are suggested in the proposal:

1. "The CTESS should include in each "category" the environmental goods that would be "available" for application to the development of national projects. Tariff reduction/elimination and the elimination of non-tariff barriers should be agreed multilaterally, taking account of special and differential treatment, and should take effect as of the time that the importing Member assigns to a given national environmental project the goods required to meet the objectives of that project.
2. The tariff benefit granted by the importing Member should cover a specific period, i.e. the project implementation phase.
3. The conditions of access to the transfer of "clean technology" and local capacity building should be negotiated within the environmental project.

Thus, two cumulative conditions will have to be met in order to be able to benefit from the reduction/ elimination of tariff and non-tariff restrictions under paragraph 31(iii) of the Doha Mandate:

1. The goods must be included in one of the environmental project "categories";
2. [T]he goods must be identified within a national environmental project.

In a joint proposal submitted in June 2007, Argentina and India, explicit and indicative reference was made to specific activities and linked to the activities of public and private entities in these fields. The approach is no longer based upon specific projects, but on the bases of listing private and public entities undertaking environmental activities. For the first time, it is suggested to define targets in advance on the multilateral level. It establishes the idea of sequencing. Firstly, it is a matter of defining environmental goals and sectors, and secondly, it is a matter of implementing these goals by private and public entities listed in the WTO, benefiting from tariff reductions or eliminations. These operations would be subject to auditing and monitoring:[29]

> The approach now proposed would be to first identify and agree on environmental activities of concern to Members. Activities such as air pollution control; water and waste water management; soil and soil conservation; solid waste management; environmental monitoring and analysis; energy saving management; and, renewable energy could be considered. This list is only indicative and not an offer from the proponents. Once the list of activities is agreed to, Members would submit the list of the public and private entities that normally carry out the agreed environmental activities in their territories. The list of entities submitted could be negotiated and then notified to the WTO. Periodical negotiations to amend the list notified by any Member may be held. All goods imported by the notified entities for carrying out any of the agreed environmental activities would be granted preferential tariff treatment, as may be agreed to by Members. Post-audit systems may be put in place by Members to monitor the actual use of the imported products for the agreed environmental activity.

The proposal further emphasises the importance of transfer of state of the art technology in areas identified, and extents activities to access in services and the removal of technical barriers to trade:

> Similar to goods, any service imported for carrying out the agreed environmental activities by the listed entities would also be granted preferential access by the Member concerned. This commitment would be without prejudice to Members' final commitments under the ongoing GATS negotiations.

[28] TN/TE/W/62, 14 October 2005.
[29] Submission by Argentina and India, JOB (07)/77 of June 6, 2007.

> Noting that domestic regulatory requirements often act as NTBs, Members should consider relaxing those requirements to the extent necessary for the effective conduct of the agreed environmental activities. Members will also consider establishing a structured work programme to address other non-tariff barriers faced by developing country Members in export of environmental goods.

2. Colombia

The proposal tabled by Colombia systematically includes services and goods and thus responds fully to the negotiating mandate.[30] It is based upon a parameters approach in assessing the products qualifying for enhanced market access. It relies upon the assumption that relevant goods and services can be clearly identified within the EPA submitted by India and also Argentina's integrated approach. The proposal seeks to limit relevant goods and services to those having direct and verifiable environmental applications. Goods need to have exclusive use in a number of stated areas of environmental control and environmental improvements. Dual use goods would need to deploy a verifiable environmental benefit. Such benefits would be defined by the Designated National Authority.

3. Uruguay

The proposal tabled by Uruguay establishes a formal linkage to MEAs.[31] Uruguay suggests that the commitments and understandings already agreed multilaterally in the MEAs would serve as the basis for the definition and liberalization of environmental goods and services. Moreover, the system of multilateral environmental agreements would provide the multilateral trading system with a guarantee in this specific area, thus enhancing the cooperation and synergy between the two systems. These instruments would essentially define the scope of relevant projects. Also, the proposal suggests that national projects would need to be certified internationally. The commitments would serve to enhance exports from the country adopting the project:

> Exportable goods (or indeed services) deriving from the said environmental activities would be listed by the CTE as "environmental goods" that qualify for the reduction or elimination of tariff and non-tariff barriers in conformity with the Doha Mandate.
>
> Thus, Members that develop national environmental projects and plans that are consistent with the environmental activities defined above would be able to export the goods deriving from such projects or plans as "environmental goods" for the purposes of the WTO. The national environmental projects or plans would of course have to be certified internationally, since a simple declaration by the national authority would clearly be insufficient. The criteria and methodology for obtaining international certification would also have to be agreed, and would undoubtedly also call for cooperation between the WTO and the MEAs.

4. Qatar

The proposal submitted by Qatar also takes up the idea of linking the identification of relevant environmental goods and services in relation to MEAs.[32] Specifically, it makes the case for combined-cycle natural gas fired generation systems and advanced gas-turbines systems within the UN Framework Convention on Climate Change (UNFCCC). It also refers to the International Energy Agency (IEA) global energy outlook, all with a view to promote these technologies.

B. Arguments on WTO compatibility

The proposals tabled by developing countries on the EPA and IA approach triggered a debate on WTO compatibility. India submitted that the EPA is fully compatible with WTO principles. The arguments were tabled in a submission of June 2006 and reflected in the following excerpts: [33]

> The Environmental Project Approach (EPA) fully responds to the objectives of Paragraph 31(iii) of the Doha Ministerial Declaration, which seeks to eliminate tariff and non-tariff barriers to trade in environmental goods and services. It responds to the objectives in a much more effective

[30] Job (06)/149, 19 May 2006.
[31] Job (06) 144, 15 May 2006 (emphasis removed).
[32] TN/TE/W/19, 28 January 2003.
[33] TN/TE/W/67 13 June 2006.

and comprehensive manner by adopting an integrated approach to the mandate unlike the "list approach". The "list approach" is limited to tariff reduction in goods only, and does not address the explicit mandate to include environmental services; it does not address in any manner the issues relating to non-tariff barriers, and comes with the added baggage of being static, needing repeated negotiations and implementation problems due to classification issues.

A project-based or sector-specific approach is not new to the WTO. Negotiations during the Uruguay Round addressed specific sector issues, namely in the field of chemicals and pharmaceutical products, medical equipments, and information technology. Recently, the Doha Declaration on the TRIPS Agreement and Public Health is another such negotiation which focused on finding solutions to the public health issues relating to diseases, namely HIV/AIDS, tuberculosis, malaria and other epidemics. The WTO thus provides a regulatory framework to find common solution (like elimination of tariffs) or creates necessary policy space for the Member countries to address the problems unilaterally (such as, by recourse to compulsory licensing of patented drugs). These examples show that Members have been able to address sector specific objectives within the general WTO regulatory framework. The EPA, therefore, is not an exception; rather it is in line with the general structure of the multilateral trading system, providing appropriate answer to address specific environmental problems of the Member countries.

…

The EPA does not conflict with MFN principles of GATT. Specific products would obtain privileged market access without reference to the origin of the product. Such preferential access is not granted on the basis of the products originating in a particular Member country, as in the case of FTAs or Customs Unions, but because it complies with the requirements of the EPA. Products from all Members will equally qualify to compete for the project. The EPA adheres to the MFN principle better than several practices presently followed by Members such as country specific tariff rate quotas, whereby the same product receives different tariff treatment depending on its origin and on the quantity of imports. In any case, Members are entitled to rely upon the criteria relating to the end-uses of products in a given market, to that extent a product used for a specific environmental purpose could be distinguished from the same products used for a different purpose (reference can be made to the Border Tax Adjustment Report of the Working Party, adopted on 2 December 1970, BISD 18/S (1972) Para 18).

The EPA is in line with the overall goal and working of the WTO to achieve sustainable development and to bring synergy between trade and environment. The role of the Designated National Authority can be built in a manner so as to provide transparency and access to project-related information. Other legal concerns (if any) can always be taken into account while negotiating an appropriate framework and agreement.

The United States submitted a number of comments and questions in response to the paper:[34] It essentially focused on the project based approach, and challenged the view that the EPA is consistent with the idea of tariff bindings and MFN obligations under WTO law. Since the project based approach is no longer pursued, the following excerpts are limited to the issue of tariff bindings and MFN:

Despite this latest effort by India to elaborate on its proposal, we remain unconvinced that India's proposed approach can deliver the kind of long term benefits that WTO Members and their exporters have come to expect from this organization and continue to expect from the DDA. Nor have we been convinced, after the fourth paper, that India's proposed approach can deliver environmental benefits.

The approach that India is proposing not only fails to deliver trade and environment benefits, it continues to raise questions in our mind about the WTO compatibility of such programs generally. In recent years, we have seen many acceding countries drop precisely these kinds of government based import controls that prevented the expansion of their economies and attraction of foreign direct investment.

….

We can also assume that our Ministers did not envision temporary reductions of tariff and non-tariff barriers that would be limited to the duration of certain projects. Instead, they most certainly

[34] Excerpts from U.S. Comments on TN/TE/W/67, as prepared for July 6-7, 2006, CTESS (footnotes omitted).

> intended binding, long-term commitments to reduce or eliminate these barriers to trade in environmental goods. Because that's how the WTO works.
>
> …
>
> India has suggested that this approach is consistent with the fundamental MFN obligation in Article I of the GATT because the tariff reductions are given without reference to the origin of the imported product. It would appear, however, that even without such explicit reference to origin, the identical product from two different sources may be subject to differential tariff treatment: a lower tariff for a product used in an environmental project, and a higher tariff for the same product not used in the project.
>
> …

C. Assessment

The EPA and IA approaches emerged in tandem and offer an interesting alternative and answer to the weaknesses of the list approach. Recent developments, notably the joint submission of Argentina and India of June 2007, merge the two concepts and introduce the idea of sequencing the definition of goals and targets and actors, the operation of which would benefit from liberalisation of market access of relevant goods and services. The proposal suggests including all purchases by these entities, without referring any longer to listing eligible goods. Also, the idea of defining national projects is no longer pursued.

The idea is interesting as relies upon *ex ante* definition of specific targets and areas. The idea was first expressed in the submissions which link such requirements to rights and obligations under MEAs. It is expanded in the joint submission by Argentina and India and thus suitable for linkages with MDGs. At the same time, the Environmental Project Approach both it its original and current state raise a number of complex legal issues. It relies upon privileging the importation of specific goods and services for specific purposes and specific operators and thus entails the potential of discrimination inconsistent with WTO obligations as they currently stand. We therefore turn to a legal analysis of the proposals under WTO law.

V. LEGAL ANALYSIS OF THE ENVIRONMENTAL PROJECTS APPROACH CONCEPT

The legal analysis of EPA/IA concept needs to be undertaken on two different levels. Firstly, it is a matter of asking whether the approach is compatible with *existing* WTO law. The analysis examines whether domestic programs privileging imports for the purposes of the project can be justified under the terms of the GATT, specialised agreements and of GATS. Secondly, it is a different matter to examine whether a negotiated agreement on environmental goods and services could accommodate the EPA concept.

A. Compatibility of environmental projects approach with existing WTO law

We first turn to the question of whether the EPA/IA concept is compatible with existing law, absent any new and particular rules on the subject to be negotiated in the context of the Doha Development Agenda. The examination is of interest in answering the question to what extent Members of the WTO can today engage in privileging the importation of products and services for the purpose of an environmental project without violating their obligations under WTO law. We first deal with goods and then turn to services. It should be added that the analysis does not include the option of granting waivers.

1. Importation of goods

a) Most-favoured-nation treatment

The EPA/IA is essentially based upon privileging the importation of goods used in the context, and for the purposes of, a defined environmental activity. The problem therefore pertains to the law of tariffs. To the extent that the scheme also operates internal privileges, in particular in relation to taxation or technical standards, it may equally entail issues of national treatment.

Article II (1) (a) GATT obliges Members to accord to the commerce of other WTO Members treatment no less favourable than provided for in its schedule of concession:

> Each contracting party shall accord to the commerce of the other contracting parties treatment no less favourable than that provided for in the appropriate Part of the appropriate Schedule annexed to this Agreement.

A Member of the WTO therefore cannot impose tariffs higher than those inscribed in the relevant tariff line of its schedule. The principle applies to bound tariffs only; the imposition of higher tariffs entitles Members enjoying initial negotiating rights or those being primary suppliers to negotiate appropriate compensation. Members, however, are perfectly entitled to impose lower applied tariffs, which in reality often is the case. Applied tariff rates, however, are subject to Most-Favoured-Nation Treatment under Article I of the GATT. A Member is obliged to apply the same rate of tariff for like products to all Members alike.

An EPA/IA scheme operating low or zero applied tariffs therefore is consistent with Article II GATT. It is also compatible with Article I provided that the same rate applies to imports from all Members. India rightfully asserts in its submission that EPA does respect MFN as all eligible products for the environmental project are treated alike, irrespective of the country of origin.

b) Like product analysis

The main problem, however, relates to the issue of whether products designated for the project can be lawfully distinguished from the same products imported and employed in a non-project related area. Article I GATT mandates that “any advantage, favour, privilege or immunity granted by any contracting party to a product originating in or destined for any other country shall be accorded immediately and unconditionally to the like products originating in or destined for the territories of all other contracting parties”. The language is broadly termed and clearly includes tariff reductions or elimination, or tax relief for products imported for the purpose of environmental projects. The crucial issue therefore is whether products used outside the project can be lawfully distinguished or whether they qualify as like

products. Product A originating in Member A is imported at preferential or zero rate for the purposes of an environmental application and use. Is the same product B imported from Member B used for different purposes entitled to obtain the same privileges or not? The answer depends upon the analysis of the term like product. Interestingly, GATT law does not provide for the constellation where the products A and B are imported from the very same country. This constellation is not addressed by Article I, neither by Article II nor by Article III GATT. In shaping EPAs, however, the likeness of potential imports of products A and B from different Members needs to be taken into account and respected.

The analysis of likeness of products is at the heart of WTO law, seeking to provide equal conditions of competition among products exported from different Members and with domestic products. Like product is a key term in some 16 different constellations in GATT, of which MFN and National Treatment are the most prominent ones. The Appellate Body held that the concept is not identical in all constellations, but varies in accordance with what it called "the accordion approach".35 Likeness therefore is not necessarily defined the same way in the context of Article I and Article III GATT. Nevertheless, the criteria and factors used in defining likeness rely upon the same foundations. They were enshrined in a Working Party Report on Border Tax Adjustments, adopted on 2 December 1970.36 The reports suggested a number of criteria which could be used in assessing likeness of products. Note that the canon was not destined to provide hard and fast rules, but elements for a case-by-case analysis:

> Some criteria were suggested for determining, on a case-by-case basis, whether a product is "similar": the product's end uses in a given market; consumers' tastes and habits, which however change from country to country; the product's properties, nature and quality.

These criteria were subsequently employed in case law and a rich body of case law emerged. Most cases relate to the interpretation of likeness in the context of Article III GATT. In the present context, the analysis of likeness in Article I is of paramount importance. The leading case relates to the distinction of different types of coffee in *Spain – Tariff Treatment of Unroasted Coffee*, adopted 11 June 1981.[37] The panel had to assess whether there existed differential treatment of various groups of unroasted coffee of different organoleptic and thus different physical qualities. It found that the physical differences were not sufficient to justify differential treatment. Foremost, it found that the different varieties were blended and resulted in similar end-use:

> 4.7 The Panel furthermore found relevant to its examination of the matter that unroasted coffee was mainly, if not exclusively, sold in the form of blends, combining various types of coffee, and that coffee in its end-use, was universally regarded as a well-defined and single product intended for drinking.

The panel prominently relied upon end-use of the product. In the present context, the question arises whether a Member may therefore rely upon different end-uses in defining non-likeness of a physically similar product. This is the constellation most likely in the context of environmental goods. Is it acceptable to distinguish products with identical physical properties but used for different purposes upon importation?

The case law of the WTO does not allow, at this stage, for a clear answer. Panels and the Appellate Body have engaged in analysis using several factors. In the Coffee case above, the panel also considered physical properties, but did not find them sufficient. The United States contends in their submission that likeness cannot be exclusively defined on the basis of end-use alone, while India emphasises the importance of end-use in the present context. Recent jurisprudence examines all pertinent factors. In *Mexico – Tax Measures on Soft Drinks and other Beverages*, the panel held:[38]

> 8.28 The consistent interpretation of dispute settlement bodies under the GATT 1947 and the WTO has been that the determination that products are "like" under Article III:2, first sentence, must be done "on a case-by-case basis, by examining relevant factors". These factors include "the

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35 Japan – Taxes on Alcoholic Beverages, Report of the Appellate Body, 4 October 1996, WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R.

36 (BISD 18/S97 (1972). For a discussion of likeness see Thomas Cottier & Matthias Oesch, International Trade Regulation: Law and Policy in the WTO, the European Union and Switzerland, at 389-411.

37 Id. at 361/362, BISD 28S/102 (1982).

38 WT/DS308R (7 October 2005) p. 119 (footnotes omitted).

> product's end-uses in a given market; consumers' tastes and habits, which change from country to country; the product's properties, nature and quality." Another relevant factor identified by the Appellate Body is tariff classification, which, if sufficiently detailed, "can be a helpful sign of product similarity", and has been used for this purpose in several adopted panel reports. The Appellate Body has added that the definition of "like products" in Article III:2, first sentence, must be construed narrowly.

The panel examined all pertinent factors in this case and concluded on the basis of all of them that the product differentiations made by Mexico are in violation of WTO obligations. Panels and the Appellate Body, however, have not elaborated on the mutual relationship of different factors and criteria. They are used on a case-by-case basis and the interplay of different factors varies from case to case.

Moreover, the criteria of end-use has been conceived and used as a factual element. It relies upon end-use as found on markets and on the basis of consumer preferences. The criterion was not intended to respond to different regulatory purposes. In the Coffee case, the stated purpose of the regulation was to reduce inflation and thus to accord lower import tariffs on brands most extensively used by consumers. The panel did not purport to draw distinctions on that basis. The specific use of a product upon importation is not relevant in WTO tariff law. Whenever a lower tariff is applied it is subject to MFN, irrespective of the purposes pursued by governments.

Product differentiation made on the grounds of other factors than those discussed above remain without impact on the likeness of products. In *Argentina – Measures affecting the Exports of Bovine Hides and the Import of Finished Leather* the Panel had to review differential internal taxation which imposed a higher advanced payment on imported than domestic products.[39] The distinction did not rely upon product differentiation, inevitably leading to differential treatment of like products. The Panel found accordingly:

> 11.169 The structure and design of RG 3431 and RG 3543 and their domestic counterparts RG 3337 and RG 2784 are such that the level of tax pre-payment is not determined by the physical characteristics or end-uses of the products subject to these resolutions, but instead is determined by factors which are not relevant to the definition of likeness, such as whether a particular product is definitively imported into Argentina or sold domestically as well as the characteristics of the seller or purchaser of the product. It is therefore inevitable, in our view, that like products will be subject to RG 3431 and its domestic counterpart, RG 3337. The same holds true for RG 3543 and its domestic counterpart, RG 2784. The European Communities has demonstrated this to our satisfaction, and, in our view, this is all it needs to establish in the present case as far as the "like product" requirement contained in Article III:2, first sentence, is concerned.

It is doubtful whether different end-use of environmental products – within and without a nationally defined project – would stand the test of differential tariff treatment. It is doubtful whether distinctions can be lawfully drawn on the basis of different regulatory purposes within the criterion of end-use. It is further unclear whether end-use can stand on its own. Finally, distinctions drawn on factors other than those employed in the like product analysis are inevitable leading to unequal treatment of like products.

In conclusion, the EPA scheme runs the risk of violating MFN and be subject to dispute settlement. No remedy, however, exists when differential treatment is accorded to products originating from the very same Member and imported for different purposes. WTO law shows a lacuna in this respect. Whether Panels and Appellate Body would seek to fill it by applying general principles of non-discrimination and the spirit of GATT is an open question. In the light of strictly textual and contextual interpretation, it is not very likely.

c) Justification under article XX GATT

Assuming that selective privileges of imports of environmental products for the purpose of national environmental projects are inconsistent with Article I GATT, the question arises whether it can be justified by taking recourse to Article XX GATT.

[39] WT/DS155/R (19 December 2000) (footnotes omitted).

Article XX GATT prescribes general and specific requirements which general exceptions need to meet.[40] Exceptions relating to the conservation of exhaustible natural resources (lit. g) and those necessary to secure compliance with domestic regulations not inconsistent with GATT obligations (lit. d) should be examined in the present context.

> 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: ….
> d) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to customs enforcement, the enforcement of monopolies operated under paragraph 4 of Article II and Article XVII, the protection of patents, trade marks and copyrights, and the prevention of deceptive practices;...
> g) relating to conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;....

The process of interfacing trade and environment has witnessed a more liberal interpretation of Article XX(g) than under GATT 1947. It is no longer required that the measure at stake directly benefit the conservation of natural resources.[41] Moreover, in line with developments of international law since the Rio Declaration was adopted in 1992, the scope of application was extended to include living resources. Goods imported relating to environmental projects used for the purposes of preserving these resources and contributing to sustainable development are eligible under the provision. However, such measures need to flank domestic policies imposing restrictions on domestic production and consumption. The importation of products for the purpose of environmental projects per se as a simple matter of tariff policy with a view to lower costs for governmental programmes would not fulfil this requirement. EPA under current GATT law therefore needs to be combined with domestic restrictions. It must be demonstrated that the goal of domestic measures cannot be achieved without such flanking measures. The issue can only be assessed on the basis of a specific environmental program.

Article XX(d) GATT offers a second and perhaps more promising option in defence of tariff preferences for project related goods. To the extent that it can be demonstrated that low or zero tariffs are necessary and thus indispensable to operate the domestic program, the conditions of the provision may be met. The *Panel Mexico – Tax Measures on Soft Drinks and other Beverages* recently summarised the requirements as follows:[42]

> 8.165 The Panel will follow the well-established two-tiered process of analysis elaborated by the Appellate Body in *US – Gasoline*:
> "In order that the justifying protection of Article XX may be extended to it, the measure at issue must not only come under one or another of the particular exceptions - paragraphs (a) to (j) - listed under Article XX; it must also satisfy the requirements imposed by the opening clauses of Article XX."
> 8.166. The burden lies on Mexico, as the party invoking the affirmative defence provided by Article XX(d), to demonstrate that the measures which the Panel has found to be inconsistent with Article III, satisfy the requirements of the invoked defence.
> 8.167. Regarding the first stage in the application of Article XX, the Panel will follow the order of analysis set out by the Appellate Body:
> "For a measure, otherwise inconsistent with GATT 1994, to be justified provisionally under paragraph (d) of Article XX, two elements must be shown. First, the measure must be one designed to 'secure compliance' with laws or regulations that are not themselves inconsistent with some provision of the GATT 1994. Second, the measure must be 'necessary' to secure such compliance. A Member who invokes Article XX(d) as a justification has the burden of demonstrating that these two requirements are met. "

[40] See generally Thomas Cottier & Matthias Oesch, International Trade Regulation, Law and Policy in the WTO, the European Union and Switzerland, Staempfli Publishers & Cameron May: Berne, London 2005, at p. 428-465.

[41] See United States – Standards for Reformulated Gasoline, Report of the Appellate Body, 29 April 1996, WT/DS2/AB/R; United States – Import Prohibition of Certain Shrimps and Shrimp Products, Report of the Appellate Body, 12 October 1998, WT/DS58/AB/R.

[42] WT/DS380/R, 7 October 2005 (footnotes omitted).

Again, the matter can only be assessed on a case-by case basis, knowing the details of an environmental program and its legal structure. It should be recalled, however, that the test of necessity is difficult to meet, in particular since privileged access merely entails a fiscal benefit to government procurement of project related goods. Unless it is shown that the program cannot operate with extra costs incurring, it will be difficult to meet the standard.

In *Mexico – Soft Drinks*, both the Panel and the Appellate Body ruled that the requirement of compliance with laws and regulations does not extend to rights and obligations under international law, in casu rights and obligations under NAFTA.[43] The Appellate Body held:

> 70. The illustrative list of "laws or regulations" provided in Article XX(d) supports the conclusion that these terms refer to rules that form part of the domestic legal system of a WTO Member. This list includes "[laws or regulations] relating to customs enforcement, the enforcement of monopolies operated under paragraph 4 of Article II and Article XVII, the protection of patents, trade marks and copyrights, and the prevention of deceptive practices". These matters are typically the subject of domestic laws or regulations, even though some of these matters may also be the subject of international agreements. The matters listed as examples in Article XX(d) involve the regulation by a government of activity undertaken by a variety of economic actors (e.g., private firms and State enterprises), as well as by government agencies. For example, matters "relating to customs enforcement" will generally involve rights and obligations that apply to importers or exporters, and matters relating to "the protection of patents, trade marks and copyrights" will usually regulate the use of these rights by the intellectual property right holders and other private actors. Thus, the illustrative list reinforces the notion that the terms "laws or regulations" refer to rules that form part of the domestic legal system of a WTO Member and do not extend to the international obligations of another WTO Member.

These findings are controversial as they completely ignore the status of international agreements in domestic law. Under monist doctrines, international agreements form part of the law of the land and may be directly invoked before domestic courts. The exclusion of international agreements from Article XX(d) GATT, such as MEA obligations, implies that environmental programmes based upon international agreements cannot be invoked unless they are formally implemented in terms of domestic laws and regulations.

Finally, an exception needs to meet the condition of the chapeau of Article XX. Jurisprudence of the Appellate Body essentially understands the chapeau to entail a prohibition of abuse of rights and thus a protection of good faith and legitimate expectations. It entails efforts to seek international agreement before unilateral measures are imposed. It requires treating all Members alike. Again, it is difficult to assess in the abstract whether an environmental programme would meet these conditions. Since EPA offers equal opportunities to all products alike, irrespective of the origin, it is difficult to anticipate specific problems under the chapeau.

In conclusion, exemptions under Article XX GATT will largely depend upon the specific feature of the environmental programme. Mere elimination of tariffs for goods used for such programmes is not likely to meet the standards of articles XX(d) and (g).

2. Market access and environmental services

a) Most favoured nation treatment

Comparable questions arise as to privileged access of service in the context of domestic environmental programs. The General Agreement on Trade in Services (GATS) prescribes, as the GATT, a general application of MFN in Article II. Whatever treatment is accorded to service providers and services of one Member is required to be granted immediately and unconditionally to like services of and suppliers of other Members. This applies irrespective of commitments scheduled. The same arguments already made under GATT equally apply. It can be argued that preferential access in the context, and the purpose, of a domestic environmental program is not discriminatory as all offers are treated alike. On the other hand, like products are treated unlike. The issue therefore is equally one of like product analysis.

[43] WT/DS380/R 7 October 2005, paras 8.174 – 8.181; WT/DS380/AB/R (footnotes omitted).

The analysis of like products under GATS has not been the subject of detailed analysis before panels and the Appellate Body. The concept is not necessarily identical in goods and services. Article XVII (3) GATS clearly relates the concept to conditions of competition.

> Formally identical or formally different treatment shall be considered to be less favourable if it modifies the conditions of competition in favour of services or service suppliers of the Member compared to like services or service suppliers of any other Member.

This definition, made in the context of national treatment and market access, is also of importance in the context of MFN which lacks a definition of its own. An interpretation based upon competitive relations, and thus parallel to the one applied to Article III(2) second sentence of GATT is likely to take place.

Applied to environmental programs, it requires equal treatment of services and service suppliers which find themselves in a competitive relationship. Granting access to services only in the framework of such programs, but excluding them otherwise may amount to a violation of MFN. Service providers admitted to a program may be able to lay foundations for further work in the private sector once market access is granted under Article XVI and XVII GATS in accordance with the schedule of commitments. It may seriously distort the competitive relationship of newcomers with established providers operating under the program.

Beyond MFN, market access in GATS depends upon commitments made in schedules in accordance with Article XVII and XVIII GATS. Depending upon sector specific commitments, Members are obliged to grant access to private sector activities within their own jurisdiction. Privileged access beyond such present commitments for the purpose of a specific environmental program basically triggers obligations under MFN.

b) Exceptions

Assuming that preferential access violated MFN obligations, the question arises whether Members may invoke general exceptions under Article XIV GATS. It should be noted that the provision does not entail a paragraph on conservation of resources, but allows for measures which are necessary to protection animal or plant or human health (lit. a). It is unlikely that this provision can be successfully invoked in the context of environmental programs. It would be necessary to demonstrate that such privileges are indispensable to operate the program. Likewise, the necessity test must be met in defending a measure in the context of securing compliance with laws and regulations. Similar arguments made in the field of goods and Article XX(d) need to be considered.

The assessment of GATS compatibility of EPA depends on specific features of the program and is difficult to undertake in the abstract. Generally speaking, it is fair to say that defence of preferential market access in the context of an environmental program, at the exclusion of others, will face problems relating to MFN obligations. Exceptions are likely to be difficult to justify under Article XIV GATS.

B. Negotiating an environmental projects and integrated approach framework

Irrespective of existing WTO Law, WTO Members are free to negotiate a framework which accommodates the needs of the EPA/IA Approach. This is essentially a matter of political will and consensus. The analysis of WTO law, as it stands, shows a number of uncertainties and tends to deny justifications for the approach. Members may overcome them by agreement. Such an agreement would form part of the WTO system. It is placed on par with other agreements and will prevail as *lex specialis* over more general provisions.

An EPA/IA Agreement would need to create the legal basis for MFN deviations in the field of goods and services, removing current legal insecurity. Technically, such measures could be inserted in schedules of commitments of Members. Tariff schedules of Members operating such programs would specify that goods imported for the purposes of agreed programmes would be exempt from import duties or subject to reduced charges. Scheduling also would allow limiting concessions below bound tariffs for the duration of projects. Likewise, similar conditions can be made in schedules on services on the basis of Article XVI and XVII GATS. Quantitative limitations as to services provided in the context of governmental programs could be scheduled under Article XVI(2)(a) GATS. The granting of national treatment for different modes

of service supplies could be limited to services provided in the context of governmental programs. Such qualifications form part of the Agreement and are binding upon Members. The GATS offers ample flexibility to accommodate the EPA.

The framework could also contain a number of criteria assessing whether the privilege granted under the EPA is justified and does not unnecessarily discriminate against other products not employed in the project. To this effect, the framework could introduce a necessity test, requiring the implementing Member to justify the exclusion of products from preferential treatment of products imported which could be used to the benefit of the project. The framework could also set out minimal standards under which preferential market access is granted under EPA: duration of the project, financial envelope, methods of procurement (transparency), judicial review against orders denying preferential access. It would establish procedural criteria to be met by national authorities for obtaining clearance by the CTESS. It may prescribe conditions for waivers to be granted if need be. Finally, it would establish linkage to dispute settlement and define the domestic guarantees on transparency and judicial review.

The crux of the matter is, of course, that an EPA Agreement requires consensus. In the light of its systemic implications on MFN and its likely effect of further tariff reductions and enhanced access in services, the approach is likely to fail in the light of para 6 of the DDA which stresses both non-discrimination and the goal of environmental protection ("the aims of upholding and safeguarding an open and non-discriminatory multilateral trading system, and acting for the protection of the environment (...) can and must be mutually supportive".) It would seem advisable to seek avenues which are more compatible with the principles of non-discrimination. It is necessary to widen the options beyond the approaches currently on the table. Before doing so, we need to include potential issues other than goods and services relating to EGS negotiations.

VI. LINKAGES WITH OTHER WTO TOPICS

Negotiations so far mainly focused on tariff reductions for environmental goods. Services have not been sufficiently considered, despite the mandate of paragraph 31(iii) DDA explicitly including invisibles. In addition, little attention has been paid to the reduction of non-tariff barriers which are of equal importance to the cause of combating environmental degradation. Furthermore, transfer of technology and special and differential treatment are two areas that, in addition to being themes underlying the DDA, are relevant and of obvious significance for EGS, but have so far received only marginal attention in the negotiations. At a late stage, they were finally tabled in the joint submission by Argentina and India in July 2007.[44]

Apart from linkages to reduction of subsidies in fisheries and thus a contribution against over-fishing and massive exploitation of the seas, explicitly mentioned in paragraph 31 DDA, additional fields within the DDA agenda are relevant and should be considered. In line with proposals made by Brazil with a view to enhance export potential for environmental goods for developing countries, linkages to the protection of Traditional Knowledge and products based upon ecologically friendly methods of production should be made. The proposal *Environmental Goods for Development,* Submission by Brazil, states inter alia: [45]

> The exports of most developing countries consist, by and large, of natural resource-based products. Most of them are endowed with plenty of natural resources that include formidable stocks of biodiversity, water, landscape and soil. Moreover, the indigenous and local communities of these countries are rich in traditional knowledge. Paradoxically, many of these local populations have to endure dreadful famine, poverty, illness and other environmental setbacks. Environmental preservation under these conditions is hardly sustainable.
>
> An adequate definition of environmental goods may constitute a relevant response to overcome this paradox, by allowing mutually supportive outcomes and a triple win situation, i.e., trade promotion, environmental improvement and poverty alleviation. Improved market access for products that have low environmental impact and/or are derived from or incorporate cleaner technologies contributes to poverty alleviation through income generation and job creation for local populations. This structural move has a multiple developmental effect throughout the respective society.
>
> Hence, it is proposed that the definition of environmental goods should cover products, such as natural fibres and colorants and other non-timber forest products, renewable energy, including ethanol and biodiesel. A FAO study for the Convention on Biological Diversity, using a loose concept of sustainable use product, indicates that such products would enjoy a market of around US$ 19 billion. Albeit inaccurate and requiring further refinement, it shows that further liberalization in the trade of these products would certainly have positive developmental effects.
>
> Improved market access for products derived from or that incorporate cleaner technologies, such as "flexi fuel" engines and vehicles could also encourage the use of environmentally efficient products and be supportive of the developmental concerns of the developing countries, as those vehicles are driven by a fuel obtained from the processing of natural resources available in the developing countries.

The proposal was instrumental to create a third avenue described above entailing the inclusion of environmentally preferable products. It should, however, also serve as basis to foster linkage with other issues under negotiations in WTO Committees other than the CTESS.

A. Protection of traditional knowledge

Traditional knowledge (TK) is currently under discussion at the TRIPS Council and also within WIPO. TK is a resource of paramount importance. It makes an important contribution to conservation of biodiversity if incentives to use it are properly placed. It often is an important source for developments in biotechnology, leading to new products. As long as TK pertains to the public domain, it is difficult to bring about equitable compensation, without which there is no incentive to preserve such knowledge in a vastly changing world. Efforts under the Convention on Biodiversity need to be supported by the

[44] Submission by Argentina and India, JOB(07)/77, June 6, 2007.

[45] TN/TE/W/59 (8 July 2005).

creation of new protection on the basis of laws against unfair protection or on the basis of intellectual property rights. Conceptual discussions are advanced.[46] Negotiators should take the matter up beyond the stages of studies. Related to TK are current efforts to bring about an obligation of disclosure of source prior to patenting of new inventions. The measure is of importance to register traditional knowledge and to create a basis for fair and equitable remuneration, should the patent result in commercially viable and successful products. These efforts are as much efforts for economic development of the rural poor, as they are efforts to foster the respect for biodiversity and thus the environment.

B. Geographical indicators and the protection of ecologically sound products (eco-labelling)

Major efforts are pending in WTO with a view to expand and enhance the protection of geographical indications (GIs). Appropriate protection of GIs offers an important potential to enhance development and marketing of local products and seek niche markets abroad. Resistance to GI protection beyond low standards embodied in Art. 22 of the TRIPs Agreement (with the exception of wines and spirits) is motivated by potentially protectionist effects of excessive GI protection. It is a matter of finding an appropriate level of protection which avoids negative effects but contributes to the development of niche markets.

Likewise, it is important to foster the protection of ecologically sound products by means of eco-labelling. While geographically defined products often strongly connotes traditional methods of production and contribute to diversity, eco-labelling seeks to avoid geographical limitations. Eco labels are open to all producers complying with the conditions and requirements of the label. In a globalising economy, they may develop into a prime tool to enhance environmentally sound methods of production, to bring about sustainable development and to enhance the protection of the environment.

C. Enhancing market access for traditional knowledge, geographical indicators based, and eco-labelled products

The linkage to these areas discussed in other fora of the WTO could consist of examining facilitated market access for products based upon TK, GIs and responding to the qualifications of eco-labels. It is here that tariff policy should be reviewed. Given high tariffs in agriculture there is a particular potential to bring about enhanced and privileged access for such products. It will be necessary to create a particular framework in treaty law in order to avoid problems related to likeness with conventional products. Recourse to substantial preferential tariff reductions for TK, GI and eco labelled products will require close cooperation with negotiations on agriculture. The same is true for TK and GI protection which are dealt with by the TRIPs Council.

D. Back to non-actionable subsidies

Finally, a thorough analysis in EGS negotiations also requires reviewing existing disciplines on subsidies. While they are largely absent under Article XV GATS, the GATT Agreement on Subsidies and Countervailing Measures (SCM) no longer addresses environmental subsidies. The category of non-actionable subsidies, provided for in article 8 of the Agreement provides carefully conscribed policy spaces for subsidies on research (lit. a), assistance to disadvantaged regions (lit. b), and assistance to promote adoption of existing facilities to new environmental requirements (lit. c). These categories were suspended in 1999 and allocated to actionable subsidies. Members no longer enjoy legal security in designing support measures, in particular in support of Small and Medium Sized Enterprises (SMEs). Development of environmentally friendly technologies and products may well benefit from a return to non-actionable subsidies, and the relevance of Article 8 should be reviewed in the context of EGS negotiations. Article 8 was mainly suspended upon pressures by developing countries, considering that it would mainly benefit developed economies and their companies. In the context of EGS, this perception may be worth reviewing, in particular if international aid made available to developing country governments and donations by international organisations working in the field of sustainable development will be taken into account.

[46] See in particular Susette Biber-Klemm & Thomas Cottier (eds.) Rights to Plant Genetic Resources and Traditional Knowledge, CABI 2005.

VII. TOWARDS A NON-DISCRIMINATORY APPROACH BASED UPON DEFINED ENVIRONMENTAL AREAS

This chapter seeks to explore the possibility of combining the different basic approaches on the table of the CTESS and the Council on Services, taking into account diverging interests at stake. It is submitted that Members should agree to take into account the merits of the EPA/IA approach, but to reconsider it in the light of legal issues discussed above. The main problem of defining the scope of an agreement and of avoiding discrimination can be overcome if negotiations focus on specific environmental areas which should be targeted in specific negotiations. Moreover, this approach also allows to take into account issued discussed outside tariff and services negotiations addressed in Chapter VI above, and to bring about a truly comprehensive approach within a specific area defined. In order to bring about an appropriate balance, we submit that the Environmental Initiative approach essentially relies upon the provision of environmental services and takes into account pertinent goods and other issues in an ancillary manner. The only self-standing goods to be liberalised are those relating qualifying under the category of Environmentally Preferred Products (EPPs). Other goods would remain subject to ordinary NAMA negotiations, following the political principles of reciprocal trade liberalisation.

A. Defining policy areas and targets: the millennium development goals

A major difficulty in negotiations in defining the scope of an EGS agreement relates to the lack of specific targets and objectives defines. This is evident in the list approach. It is equally evident in the EPA approach, leaving such definitions to Members, and to a lesser extent in the Integrated Approach which partly takes recourse to existing MEAs. It is submitted that the main instrument of reference, from which more specific targets could be drawn, can be found with the Millennium Development Goals of the United Nations. They currently encapsulate an ambitious agenda. There are eight goals to be achieved by 2015 that respond to the world's main development challenges.[47]

Mutual recourse to MDGs and EGS negotiations is mutually beneficial. Appropriate linkages therefore should be established for the following reasons.

Firstly, recourse of MDGs to WTO law is beneficial. International trade regulation is of key importance in achieving appropriate remedies and solutions, in living up to the expectations of the MDGs. In particular, negotiations on EGS can and should seek to support the specific MDG targets through appropriate rules and regimes. We are facing the question how best WTO negotiations on trade and environment can contribute to attaining MDG Targets 9-11 and Sub-targets 25-32. Targets 9-11 relate to principles of sustainable development and the loss of environmental resources, the reduction by half of the proportion of people without sustainable access to safe drinking water and improving living conditions of at least 100 million slum dwellers are affected by trade policies.

International trade regulation is crucial in providing and spreading new technologies in support of the MDGs. It is of equal importance for conservation through sustainable use of resources, as such resources are only worked if they can be traded and generate income. They may be impeded if trade policies do not take these needs into account in an appropriate manner. Trade regulation largely renders effective, or breaks, goals and efforts undertaken on the basis of international action plans, multilateral environmental agreements and domestic policies. The WTO is at the heart of the matter. It is important to establish appropriate linkages between the two fields, not often discussed in tandem, but rather in isolation, so far.

It is generally agreed that trade liberalisation produces a win-win constellation in meeting long-term environmental concerns. In practical terms, liberalization of environmental goods and services can contribute to environmental goals by lowering prices of goods and services destined for environmental use relative to their non-environmental substitutes, thus encouraging industries and consumers to prefer the former over the latter.

[47] Source: http://www.undp.org/mdg/goallist.shtml (visited October 12, 2006).

Secondly, recourse of WTO to MDGs is beneficial as they assist future negotiations to define appropriate goals and targets. They assist in defining the negotiations and to overcome the problems in defining the scope of negotiations, goods and services and non-tariff barriers to be included. It will be seen that definitions relating to specific sectoral initiatives also allow operating the system on a non-discriminatory basis, compatible with the principles of WTO law. Moreover, linking WTO to MDGs brings about a inherent linkage to social and economic development of developing countries. It offers a major contribution in complying with the underlying philosophy of the Doha Declaration Agenda. Focusing on MDGs in the WTO entails an important element of rebalancing in the light of an environmental industry still substantially linked to interest of industrialised economies.

Negotiations could as a start, and for example, focus on the following fields:

- Access to, and supply of, clean water; treatment of wastewater and disposal of sewage (sanitation)
- Solid waste management (beyond hazardous waste), including disposal of information technology equipment
- Promotion of renewable energies and fuel efficiency (possibly limited to transportation)
- Promotion of traditional knowledge-based and extensively produced agricultural goods (organic foodstuffs).

These fields may be addressed simultaneously, or consecutively. Members would seek a combination of goals which is able to respond to the needs of a balanced outcome and which will be of mutual interest to WTO Members.

A. Basic framework

Area specific, sectoral initiatives are not alien to the WTO tradition. We recall MFN based sector initiatives by main suppliers and importers in the Uruguay Round to reduce and eliminate tariffs in the field of medical equipment and other fields. There is a special agreement relating to subsidies in the aircraft industry. In the field of intellectual property, the problem of access to essential drugs was addressed by the Doha Waiver, and thus special rules emerged on compulsory licensing for pharmaceutical products. In the field of services, negotiations increasingly turn to multilateral sectoral negotiations. The WTO therefore is capable and well prepared to address specific regulatory problems if need be. WTO therefore can undertake to make special efforts in specific areas and thus contribute to the solution of specific problems.

Accordingly, the paper suggests proceeding in two steps:

- Firstly, to negotiate and define the topic of limited specific *Multilateral Environmental Areas Initiatives* (EAIs) to which trade liberalisation should apply in terms of a sectoral initiative. The idea of relating concessions to specific regulatory areas and to goals defined in international instruments can be found in a number of proposals, most prominently in the joint proposal by India and Argentina of June 2007. They should be linked to the basic idea of working on the basis of *multilaterally* defined and agreed targets and projects.
- Secondly, it submits to negotiate implementation in the fields of services, tariffs, non-tariff measures, and possibly intellectual property rights, as well as technical cooperation. To this effect, it builds upon the idea of binding tariff concessions applied on a non-discriminatory basis, but to *eventually link the scope of goods to those essential to provide relevant environmental services* in achieving the agreed target goals. Negotiations can only succeed if results of reciprocal commitments and benefits can be achieved which not only promote the general public good of global environment and bring about improvements, but also satisfy commercial interests, current and potential, of Members of the WTO in a balanced manner.

The idea of organising negotiations on the basis of specific regulatory areas and goals can provide a key to manage the complexity of defining eligible products (services and related goods) for preferential treatment. Other than in EPA/IA discussed above, the pertinent topics are not defined unilaterally, but multilaterally. They result from international agreement and agenda setting. Also, they do not pertain to specific environmental projects or actors in countries, but address an overall regulatory goal and field.

Finally, they lead to binding and lasting commitments in the WTO in services and related goods. They overcome the problem of temporal concessions. We submit that this multilateral approach responds to the development dimension as it uses specific environmental objectives that are in themselves directly or indirectly supportive of developmental goals, as a framework for identifying environmental goods and services to be liberalised. Within such framework, other equally important aspects of the negotiations could then be approached in a more coherent fashion such as non-tariff barriers, special and differential treatment, and technology transfer.

B. Methodology of environmental area initiatives

Appropriate target areas on the basis of MDG goals and other suitable instruments will be agreed upon on the political level, possibly by the Trade Negotiations Committee (TNC), based upon consultations with the CTESS and other WTO bodies. In the future, it may also be a matter to be decided by the Ministerial Conference. It is important to endorse the specific topics and the approach, with a view to secure coordination with other negotiating groups. Needless to emphasise that this will be greatly beneficial to communicating the objectives of negotiations to the public at large and document major efforts of the trading system in meeting basic needs of humans and to enhance environmental protection. It inherently would make a contribution to the debate on trade, environment and basic human rights. WTO thus can make a very useful contribution to the current debate on the right to water, making available its own and efficient tools to promote the improvement of sanitary conditions around the world. They would place the attainment of these projects before purely commercial considerations, thus enhancing legitimacy of WTO. These effects both for the organisation of negotiations, outcomes and the perception of the WTO cannot be overstated.

High level negotiations on Multilateral Environmental Area Initiatives will need to anticipate a balanced approach and avoid that the initiatives will essentially be of commercial interests to one group of countries alone. While areas involving high technology inherently and mainly benefit industrialised Members and is likely to exclude a pure and separate list approach in goods and/or services for developing countries, a proper balanced could be achieved by focussing negotiations on environmental services in tandem with negotiations on related goods, both of which are essential in achieving the defined goal and target. *By linking the liberalization of goods to services, which in turn is linked to a defined regulatory goal, a balance between definitions and classifications could be achieved.* It also avoids a situation where an agreed initial list may result in a product coverage that is too narrow as to be restrictive, or too broad as to be meaningless, as well as a bias towards end-of-pipe approaches that is suggested by, for example, the APEC list. The CTESS discussions could benefit from the examples provided by the WTO Agreement on Information Technology Products (ITA) and other international agreements like the CITES and the Montreal Protocol. [48] In addition, a parallel focus on environmentally preferable products could further help to enhance such a balance. It would be possible to shape this sector initiative along goals set forth by the Convention on Biodiversity and other international programs supporting this effort. Enhancing market access for environmentally preferable products could be linked to the promotion of protection of Traditional Knowledge (TK) by granting facilitated market access for such products. It also could provide the framework to introduce enhanced protection of TK in the field of intellectual property rights, linking it to the discussion on geographical indications, the protection of bio-labelled food, and thus of specialities and emerging niche products.

It is likely that a comprehensive and balanced services' based EAI approach is only suitable in medium and long-term. Current negotiations in the Doha Round may need to focus on goods and services in isolation. It is even unlikely that timely agreement on specific target areas can be found. Results, however, should not prejudice future developments of a more comprehensive system to be designed in the post Doha negotiations.

C. Implementation in different regulatory areas of WTO law

Once the field and topic of EAI is defined, technical negotiations within CTESS turn to implementing the initiative in the respective regulatory fields of WTO law. It will be able to draw from proposals on the table and will need to venture into the angles of services, goods, technical cooperation and, possibly, intellectual property rights.

[48] Vaughan (2003).

A specific Multilateral Environmental Area Initiative allows to address and define all the pertinent issues relating to a particular field in a rational manner, and to bring about a package of measures and commitments not only in environmental goods and services, but also in the field of IPRs. These commitments will be implemented in accordance with principles of WTO law. They will result in binding commitments in GATS schedules. They will result in binding commitments in tariffs, and may lead to additional understandings in the field of TBT and SPS. They will not be limited to specific programs, but apply to all relevant products and services, including those with dual use, on the basis of MFN.

The CTESS would need to secure horizontal coordination between the different fields involved. The Chair, Members and the Secretariat need to assure that these concerns are being implemented in the respective negotiating groups. Since negotiations are limited to specific sectors and guided by overall goals defined, the complexity can be reduced, and the task should be achievable. This is true more so as the preparatory work partly links proposals to specific sectors and goals and are intended to "contribute to the fulfilment of national and international environmental priorities including Multilateral Environmental Agreements, the MDGs (in particular on access to safe water and sanitation), Agenda 21 and the WSSD Plan of Implementation".[49] Other proposals, based upon the APEC, OECD and UNCTAD lists, contain items which will be relevant in the respective fields of a defined EAI.

With respect to items and concerns outside of the defined EAI, Members will deal with these items in regular NAMA and non-NAMA negotiations. They may form part of the overall package and can be balanced with non-environmental concerns and concessions. The same is true for negotiations in the field of services and intellectual property rights. Other than within the EAI, these items are negotiated from a market access or competition perspective, possibly producing beneficial externalities for the environment.

D. Operational requirements in preparing for environmental area initiatives

The realisation of EAI requires a number of preparatory steps which entail agreement on operational principles and difficult issues which need to be addressed in detail. The following calls for attention in preparing discussions. Additional work is primarily required in the field of services which offers the starting point under the EAI approach. Criteria for choosing targets and, subsequently, for related services and goods need to be defined. Finally, it is a matter of drafting an appropriate framework agreement which allows securing coherence and co-operation among different fora of the WTO concerned.

1. Services: updating the W/120 list

While the Harmonised System for the classification of goods is sufficiently detailed, shortcomings still exist in relation to classification of services. The eventual effectiveness of the EAI approach depends on how well the classification of environmental services is able to overcome its present limitations, in particular paying attention to new and evolving areas in the industry, and categories of special interest to developing countries. It thus becomes imperative then for all Members, first and foremost, to engage more actively in the ongoing discussions on classifications with a view to update the W/120 list into one that is more representative of the realities of the industry, as well as being able to achieve a balance of the interests of both developed and developing countries.

The W/120 classification requires each service sector to be mutually exclusive (services in one sector cannot be covered by another sector). This raises two issues: first is the question of how to preserve this mutually exclusive nature of W/120 even as it is being updated for the abovementioned purposes. And second, the implications on the design and delivery of integrated environmental services which may require a cross-sectoral approach, that is, the inclusion of other services that may be currently classified across categorizations elsewhere in the W/120 list (e.g. design and engineering services). To address this complication, the proposal of establishing a core and a cluster list could be a starting point for discussion. It is crucial that the approach to environmental services commitments be undertaken as a package. In effect, any Member who chooses to grant market access in a "core" service has to make commitments as well in the related service that is classified elsewhere in the W/120 sectoral list. This

[49] Submission by the EC, TN/TE//W/56, 5 July 2005 para.2.

addresses the heterogeneous nature of the providers, as is often the case, where entities making up the sector cut across "vertical" sectoral lines of the list involving "vertical" functional specialists of "horizontal" service providers.[50] The schedule of any commitment in environmental-related services not classified under "core", however, has to state the restriction to the effect that this applies only to services rendered in relation to a cross-referenced "core" environmental service. [51] The OECD has done extensive work on classification issues, and their recommendations on new categorizations could be useful for further work by the Special Session of the Council on Trade in Services .[52] There is also the important issue of how to negotiate and subsequently, schedule meaningful commitments in environmental services which fall under GATS but for which specific regulatory structures exist, and which are provided through various and evolving forms of private-public cooperation. Members have to find ways on how to schedule commitments that reflect and preserve the specific nature and provision, as well as the role of the public sector while at the same time allowing trade to develop within the GATS framework.[53]

2. Identifying environmental areas and regulatory goals

Members have to identify environmental goals using the specific targets outlined in the Millennium Development Goals as a starting point. This does not preclude the inclusion of other environmental areas which are also deemed priorities for human development and sustainable environment. Sub-areas can be identified under each of the target indicators in MDG Goal 7, to allow more specificity in commitments to be undertaken.

Goals defined have to be *time-bound* (e.g. a 10-year target for elimination of barriers to trade in goods and services relevant to an identified environmental area), that is, implemented within a specified period. Each environmental area will be phased-in by order of priority, all of which will be set multilaterally. This does not, however, preclude any Member from pursuing unilateral reduction of barriers to environmental goods and services applicable in any environmental area, albeit all known areas, ahead of this goal-setting exercise and any time frame ultimately agreed.[54] By setting definite time-frames for the achievement of specific goals, the WTO will help drive timely and meaningful responses to urgent environmental problems and human development challenges. The export interests of developing countries, moreover, have to be addressed unequivocally so that any combination of environmental areas that will eventually be agreed upon must include an area which directly promotes the trade of environmentally preferable products (EPPs) especially organic and natural-based products in which they have comparative advantage.[55] The attendant and significant issues of eco-labelling and product and process methods (PPMs) also have to be dealt with.

3. Establishing criteria for the inclusion of relevant services and goods

Once Members have named a certain environmental area as priority, all environmental services under the updated W/120 classification that are significant to the achievement of the goals for that area have to be identified. The identification of goods to be liberalized then follows, provided either of these conditions is met - (a) the good is *essential* to the delivery of the said services, and (b) it is a good or cluster of goods that is common to more than one type of environmental service.[56] To determine what can be considered

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50 OECD (2001) provides some examples such as: (1) Engineering, consulting, and project management services being provided across functional segments by environmental divisions of big engineering firms, which enter into contract and partnership arrangements with smaller firms, (2) pollution remediation and prevention activities involving the integrated provision of equipment, technology and services, with project managers and engineers calling in the required medium specialist (water, air, soil, habitat) on a contract basis.

51 An alternative proposal regarding "dual use" has been mentioned by OECD which incorporates specifically environmental end-use services under the Environmental Services sectoral classification, with a clear description of the specifically environmental aspect of the service, for example, design and architecture services for the construction of waste management facilities OECD (2001).

52 Refer to some examples in OECD, 2001, p. 24-25.

53 This question was raised by Ulrike Hauer in his commentary in UNCTAD (2003c). The issue is pertinent to the discussion of access to water in Chapter VIII of this paper.

54 Needless to say, since current commitments in environmental services remain in force, partial fulfillment of goals in some environmental areas is already taking place and should be counted against future commitments.

55 This is not to say that developing countries are not efficient exporters of other types of environmental goods, as indeed trends show that they have developed export capacity in manufactures and are increasingly trading with other developing countries.

56 Examples of goods commonly used in several types of services are certain chemicals, catalysts, iron exchangers, laboratory refractory equipment.

"essential", specific criteria have to be developed by the Members with the help of the WTO Secretariat. Any good complying with the two conditions makes it to the list, whether it has dual use or not. The only exception is the mandatory identification of EPPs for inclusion in the list, which will not be conditioned on the provision of an environmental service.[57] This is also in consideration of the development dimension which is an underlying principle of the WTO as expressed in the in the preamble to the WTO Marrakech Agreement, the Doha Ministerial Declaration and other key WTO documents. All factors required to evaluate the inclusion of relevant goods and services should, therefore, seek to secure a "triple win" for trade, environment and development. Specifically, they should ensure that developing countries secure a "share in the growth in international trade commensurate with the needs of their economic development" (WTO Preamble), and "place the needs and interests of developing countries at the heart of the WTO work programme" (Doha Declaration, paragraph 2).[58]

Defining essential services and goods for the attainment of a particular environmental goal entails difficult issues of demarcation which may entail an analysis of like products. The application of stringent criteria based upon WTO jurisprudence in goods may render such demarcations difficult as goods are essentially defined on the basis of physical characteristics and end use for the purpose of assessing competitive relationship. This may limit the possibility for product differentiation as Article XX(d) and Article XX(g) GATT 1994 merely allow exemptions if the exemptions is required to implement GATT consistent domestic market regulations and for the protection of non-renewable resources. For example, it would be difficult to distinguish between fuel efficient and less fuel efficient motor cars on this basis. In the field of services, the doctrine of like products is far from settled. Art XVII: 3 GATS essentially relies upon the conception of modification of competition between different products and service providers. The combined approach to services and goods in the context of EGS may suggest reviewing the potential of the aims and effects test which applies to Article III:2 second sentence and is also suggested to suitable in the context of GATS.[59] To the extent that a service and product differentiation does not have the effect of protecting domestic producers, Members are entitled, under this doctrine, to operate product differentiation for regulatory purposes, including taxation. The same philosophy could also apply as a guideline for defining essential products in the context of implementing a specific environmental goal. For example, it may offer guidance in including certain engineering services, but not others. Likewise, it may offer guidance to include products used for specific purposes, while excluding other products which, on the basis of standard criteria, may be considered like, but are mainly used in a different context.

The list of goods included remains open-ended, subject to periodic review. Any subsequent or new product complying with the above conditions is added to the list. This is to anticipate the placement in the market of newer and more environmentally efficient products expected to occur on a more or less regular basis as a product of continuous innovation in the industry. Thus it addresses the issue of the list becoming obsolete and irrelevant for the purposes of future tariff reduction or elimination.

All commitments on environmental services remain within the ambit of GATS, and levels of commitment as to the level of market opening need to be negotiated either bilaterally or on the basis of sectoral initiatives. Since liberalisation of services strongly depends upon capacities to regulate and monitor markets, commitments need to take the level of regulatory development, for example in the field of competition law and policy of individual developing members, into account. The same holds true for tariff elimination and reduction in tariffs, which needs to consider fiscal needs and thus the level of development of internal revenue systems. Both schedules on services allow for such flexibility in accordance with the principles of progressive liberalisation in services and goods. Developing countries, for example, may commit to liberalize a lesser number (an agreed percentage of the total) of goods in the list, with lower tariff reductions, and over a longer period. But commitments will be permanent and binding.

A practical issue in environmental goods is their classification under the Harmonized System nomenclature. The HS Code is common at the 6-digit level. In most cases, however, the system does not identify environmental goods at this level of aggregation. This occurs when among multiple products classified under a common 6-digit code, only one or a subset, may be considered environmental good(s). Extraction of tariff lines to 8- or 10-digit for national tariff purposes can be done to address this ("ex-outs"). The use of ex-outs in dual-use goods differentiating between that with an environmental use and that with none, can also help avoid the problem of double-counting or overestimation in trade data.

[57] EPPs include non-timber forest products, clean fuels (such as methanol, ethanol, or biomass), renewable energy products, and products from natural fibres.

[58] Stilwell (2007).

[59] Cossy (2006).

This is particularly important in tracking trade flows and other trade data analysis. Members have to work with the World Customs Organization on this issue.

4. Issues of particular interest to developing countries

Proposals currently on the table mention the importance of discussing the related issues of technology transfer, as well as technical barriers to trade, and ecolabelling, but so far no elaboration of the issues have been put forward. These issues are, in fact, of special interest to developing countries. For one, technology transfer is pertinent to the development of their domestic capacity in this sector. Moreover, by developing the supply-side capability of the developing countries, it enables them in future to become exporters themselves. Various studies by OECD and UNCTAD have suggested trade in services as a channel for technology transfer and dissemination.[60] Liberalization of trade in services can facilitate access to environmentally sound technologies and know-how which are still largely concentrated in developed countries. There are (2) possible ways of transfer: the "passive" technology spillover which describes the actual passage of a technology embedded in an imported service when undertaking GATS Mode 1 or cross-border supply commitments; and the "active" knowledge spillover resulting from Modes 3 (commercial presence) and 4 (movement of natural persons) which occur with skills learning and adaptation, and technical expertise diffused with formal and informal training as well as knowledge sharing. [61]

Articles IV and XIX GATS provide Members the flexibility to pursue transfer of technology policies. Moreover, Members may design their GATS commitments in a way that facilitates technology transfer by specifying limitations and conditions in their schedules with a view to complement such policies. Technology specifications can be indicated in the schedules, as well as partnership arrangements that by their nature promote technological spillover, and local personnel requirements. Conditions on market access and national treatment can support measures to attract foreign technology, encourage collaboration between domestic and foreign firms, and support training of domestic labour force. Developing countries may choose to liberalize types of services and defining a sectoral coverage which have the highest potential for technology diffusion.[62] These efforts can be supported by applying appropriate provisions under the TRIPs Agreement on transfer of technology. In fact, EGS negotiations and commitments offer an excellent opportunity to implement Article 66 para. 2 which obliges developed countries to " provide incentives to enterprises and institutions for the purpose of promoting and encouraging technology transfer to least-developed countries". Sectoral agreements on specific policy goals could include such incentives, for example tax exemptions for companies investing in sustainable technology development in least developing countries.

In terms of GATS modes of supply, current proposals (mainly from developed countries) call for a reduction or elimination of restrictions on Mode 3, and a marginal suggestion to discuss Mode 4. Developing countries have a particular interest in obtaining concrete positive commitments on Mode 4. The movement of natural persons (Mode 4) is equally important in contributing to the so-called win-win-win strategy of linking trade with human development and sustainable environment. Specific proposals on Mode 4 have to be put forward and discussed with the end in view of arriving at conditions that substantially reduce existing barriers and permit real access, especially to developed country markets.
Another important issue for developing countries is domestic regulation. Increasing the participation of private sector in environmental services increases the need to have good regulatory framework that will ensure that economic and social objectives are met. In fact, some analysts have suggested that it is an issue of sequencing, wherein strong domestic regulatory framework has to be in place first before further liberalization in services is undertaken.[63] This is especially important in areas where there is a big public service component to it and universal access is the primary goal, such as water services. Effective regulatory bodies are necessary to subject commercial providers to tariff regulations, quality standards and welfare concerns which have to be renegotiable in order to allow for changing economic circumstances.[64] Most developing countries, however, have weak and poor regulatory capacity. In these countries, where poverty alleviation and distributional objectives are the main considerations, the challenge for regulation is greater.[65]

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60 See for example UNCTAD (2003a) and Gelosso Grosso (2005).
61 UNCTAD (2003a).
62 Ibid.
63 Such as Kirkpatrick (2006), Mehta and Madsen (2005).
64 Ugaz (2001), and Rees (1998), cited by Mehta and Madsen (2005)
65 Kirkpatrick (2006).

Special and differential treatment, as well as technical assistance, can be instruments to address the challenges of technology transfer and regulatory capacity. Special and differential treatment, moreover, can provide flexibility in the use of subsidies for services relevant to areas requiring universal access, such as water where cross-subsidization is common and a necessary practice.

In terms of technology transfer, trade in environmental goods and services is the most direct route,. A linkage, however, must be made to other channels such as investment, IPR, government procurement, MEAs and development cooperation. It is, moreover, in the interest of developing countries if there is "positive coherence" between negotiations in the WTO and environmental projects funded by multilateral agencies in terms of addressing financing needs and capacity building as against "pre-empting negotiating margins and forcing premature liberalization."[66]

5. Drafting an environmental goods and services framework agreement

To put together the mechanism for implementing this approach and consolidating various issues relevant to the sector, this study proposes the drafting of an Agreement on Environmental Goods and Services. Provisions have to set out the modalities for reduction of tariff and non-tariff barriers in environmental goods and services, clarify linkages with existing commitments in goods and services, and scheduling commitments. Provisions also have to address overlaps with other agreements and relevant provisions, e.g. clarifying the relationship between publicly owned and operated monopoly/ exclusive service suppliers and public procurement. Relevant provisions are those in GATS Article VIII[67], and in the Agreement on Government Procurement. There should be a mandate for regular review of classification issues in services, and until applicable, in goods (as eventually tariffs will be eliminated and thus obviate the need for a review), keeping the list of goods open-ended in order to allow the inclusion of innovations and new products until necessary.

By naming a particular environmental area as a guiding objective, and linking the identification of goods to liberalise to the services supporting the said environmental area, the EAI approach not only takes into account the synergies between the provision of environmental goods and services, it also aims at more coherence in the negotiating process, where discussions do not take place in a seemingly fragmented manner, in need of a conceptual framework.

An important feature of the EAI approach is that the mechanism for implementing it in terms of liberalization commitments neither deviates from or makes exception from the general principles and current practice, nor create special and preferential rules that could create ambiguity and legal insecurity. Environmental services, abide by the W/120 classification with modifications, remain within the ambit of GATS and thus are governed by the same rules as trade in all other services. In environmental goods, tariff commitments will be binding, applied on an MFN basis, and scheduled accordingly in the same way that trade in all other goods is treated in the current rules.

In order to maximize the opportunities and synergies that trade can contribute to the achievement of human development goals, the scope of any agreement in environmental goods and services that will eventually be reached has to cover all possible environmental areas that may be addressed by trade commitments. It has to take into account the new areas that the industry is gearing towards as it evolves from its focus on short-term compliance issues to more efficient resource management.

Special and differential treatment provisions to include not only the usual flexibilities in reduction commitments, but also the inclusion of disciplines and flexibilities governing the use of subsidies in specific sectors requiring universal access to service delivery, such as water for human consumption. Specific provisions on technical assistance aiming towards technology transfer to assist developing

[66] Vikhlyaev (2004).

[67] Art. VIII:1 requires each Member to ensure that any monopoly supplier of a service in its territory does not, in the supply of the monopoly service in the relevant market, act in a manner inconsistent with that Member's obligations under Article II [MFN] and specific commitments. Art. VIII:2 requires that where a Member's monopoly supplier competes, either directly or through an affiliated company, in the supply of a service outside the scope of its monopoly rights and which is subject to that Member's specific commitments, the Member shall ensure that such a supplier does not abuse its monopoly position to act in its territory in a manner inconsistent with such commitments. Art. VIII:3 and Art. VIII:4 refer to consultation, transparency, and notification procedures. Art. VIII:5 establishes that provisions of this Article also apply to cases of exclusive service suppliers, where a Member, formally or in effect, (a) authorizes or establishes a small number of service suppliers and (b) substantially prevents competition among those suppliers in its territory.

countries in developing domestic capacity in this sector, as well as assistance towards strengthening their regulatory capacity have to be included. The Agreement should also address technical barriers to trade, keeping in mind that the way environmental standards are designed could lead to their becoming a trade barrier. Provisions to cover transparency and notification procedures, as well as dispute settlement, must also be included.

Through such an Agreement, it will be possible to secure and lock-in environmental commitments toward the achievement of identified and multilaterally agreed environmental areas. Moreover, it generates an added value to the entire liberalization exercise as it provides a further imperative to Member countries to undertake commitments for environmental objectives than they would otherwise under separate negotiating frameworks in goods and services.

VIII. ACCESS TO WATER: AN ILLUSTRATION OF LINKING ENVIRONMENTAL GOODS AND SERVICES NEGOTIATIONS TO MILLENIUM DEVELOPMENT GOALS

A. Regulatory challenge

Ways and means to bring about access to clean water amounts to one of the most controversial contemporary issues. It entails a debate of public services (*service public*) versus liberalisation and thus privatisation. Many argue that this is a goal not suitable for liberalisation of essential services and goods, and should be kept out of GATS negotiations, being a natural or legal monopoly for governments to operate. Few countries have made commitments in this field, and few plan to undertake commitments in the future. At the same time, it is reported that an estimated 1.1 billion people lack access to clean water and almost 2.5 billion – 40% of the world's population – lack access to adequate sanitation, mainly in developing countries.[68] This is an enormous challenge to governments worldwide that demands prompt and effective response. That such a basic need, which has been recognised as a human right[69], remains beyond the reach of a fifth of the entire human population makes the argument for the universal access to water even more compelling. The status quo is far from acceptable, and all ways and avenues to improve the right to water need to be explored, including the potential contribution of trade regulation in the WTO.

The example of access to water offers a tough test case for exploring the potential of EGS negotiations based upon MDGs. This section seeks to explore the potentials of EGS negotiations and to identify regulatory conditions which would need to be met in order to bring about effective improvements in implementing the right to water by means of EGS negotiations in coming years. Other examples, such as renewable energy, will be less controversial. Nevertheless, the pressing and timely example on water is suitable to examine the EAI approach. It assists in identifying difficulties. It helps defining basic regulatory conditions upon which trade liberalisation in services and goods may contribute to the improvement of people's livelihood within a future framework. Results may, as appropriate, be also applied to other and less contentious regulatory areas entailing public goods and services.

The benefits to human development resulting from environmental services are recognised by their inclusion in the Millennium Development Goals. Goal 7 states, "Halve, by the year 2015, the proportion of people without sustainable access to safe drinking water."[70] UNCTAD has identified basic human needs relating to drinking and wastewater treatment, sanitation and waste management, as a priority need of developing countries[71] It clearly amounts to a priority of development policies and thus should also be taken up within the Doha Development Agenda or in its aftermath, with a view to support the achievement of the goal.

Neither the MDG, nor international law in general, defines ways and means of providing the environmental service on access to water and sanitation. The bulk of it has been traditionally provided for by public authority on the basis of domestic administrative law. Currently, the private sector covers only 5% of services provided globally, albeit the trend has been increasing, in particular in developing countries. The reasons for privatization in these countries are well known – lack of financial capacity to undertake the huge investments involved is an undisputed fact, while the inefficiency of government in running big projects and weak administrative structures are more debated ones. The experience of a number of developing countries who have undertaken steps to privatise are well documented.[72] The record, however, is ambiguous as to impact on the poor, e.g. price charged by private sector facilities has often increased, with benefits to the company in terms of larger revenues, and to government in higher tax revenues. Sometimes, higher prices have been accompanied by an extension of the network delivery to the poor.

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68 Metha and Madson (2005).
69 UN Economic and Social Council (2003).
70 http://www.unmillenniumproject.org/goals/gti.htm
71 UNCTAD, 1996 as cited in OECD, 2001.
72 See e.g. Morgan (2006); Kirckpatrick and Parker (2005).

B. Domestic regulation

The controversial issue of water services is evidenced by the absence of GATS commitments on water distribution.[73] The absence, as well, of a proposal on the table in the current Doha negotiations referring to its liberalization is further proof of the strong hesitation of Members to discuss the issue.[74] These political sensitivities are not likely to improve the conditions of those suffering from lack of access to clean water. Instead, it is a matter of identifying, on the basis of existing evidence, pertinent issues and of developing appropriate regulatory framework conditions based upon which transnational provision of water supplies may work. Clearly, it is not simply a matter of removing trade barriers and to open up for privatization.

We submit that using the framework of the EAI approach in negotiations, the opening of water services through GATS and GATT, subject to appropriate regulatory conditions can be instrumental in providing access to safe drinking water to the many millions currently deprived. The provision of water services can be efficiently delivered and better coverage ensured through the opening up of the sector to competition from the private sector, *provided* there is administrative and institutional capacity to regulate and enforce regulations effectively. Achieving a balance between the seemingly competing issues of providing universal service at affordable cost and maintaining company profits has always been the main challenge for private sector participation in areas entailing public services, such as telecommunications or postal services. The same holds true for water services. The industry is characterized by significant economies of scale and sunken investment. Without proper regulation, opportunities for monopolistic behaviour abound. A government which decides to adopt a policy of involving private actors has to then ensure that the domestic regulatory framework is in place and is working properly. Of particular importance is government's ability to implement anti-monopolistic regulation as well as measures that guarantee the development and maintenance of essential infrastructure in poor rural and urban areas.[75] Moreover, regulation is needed for health and environmental considerations. In the case of water, excessive extraction may endanger future supplies as well as the quality of water. The question will need to be addressed to what extent these requirements need additional support in multilateral negotiations within the WTO and perhaps outside of it as well.

C. Negotiations

The service component of water supply has been defined by the OECD/Eurostat as "any activity that … designs, constructs, or installs, manages or provides other services for water supply and delivery systems, both publicly and privately owned. It includes activities aiming to collect, purify and distribute potable water to household, industrial, commercial or other users."[76] In the GATS classification, services related to water for human use (potable water collection, purification treatment and distribution through mains) are under CPC 18000, 7139 and CPC Version 1., 69310.

Figure 1. illustrates how the negotiations on environmental goods and services can be organized thematically through the EAI approach in order to achieve specific and well-defined targets that meet environmental and developmental goals. As an example, Members could identify water for human use as a negotiating area with the overall goal of improved access to safe water.

1. GATS negotiations

After identifying improved access to safe water as a negotiating area, Members proceed to identify which particular environmental services (core and cluster) would apply to the provision of drinking water. Individual members will then be encouraged to undertake specific commitments designed according to the level of opening that they deem appropriate and to the level that their individual domestic regulatory framework is capable of enforcement. Undertaking commitments in water services under the GATS will not affect the right of governments to regulate quality, safety, price or any other policy objectives as they see fit. More important for the water sector, Members should remain free to specify conditions in their schedules that are designed to attain certain policy goals, for example in technology transfer. More

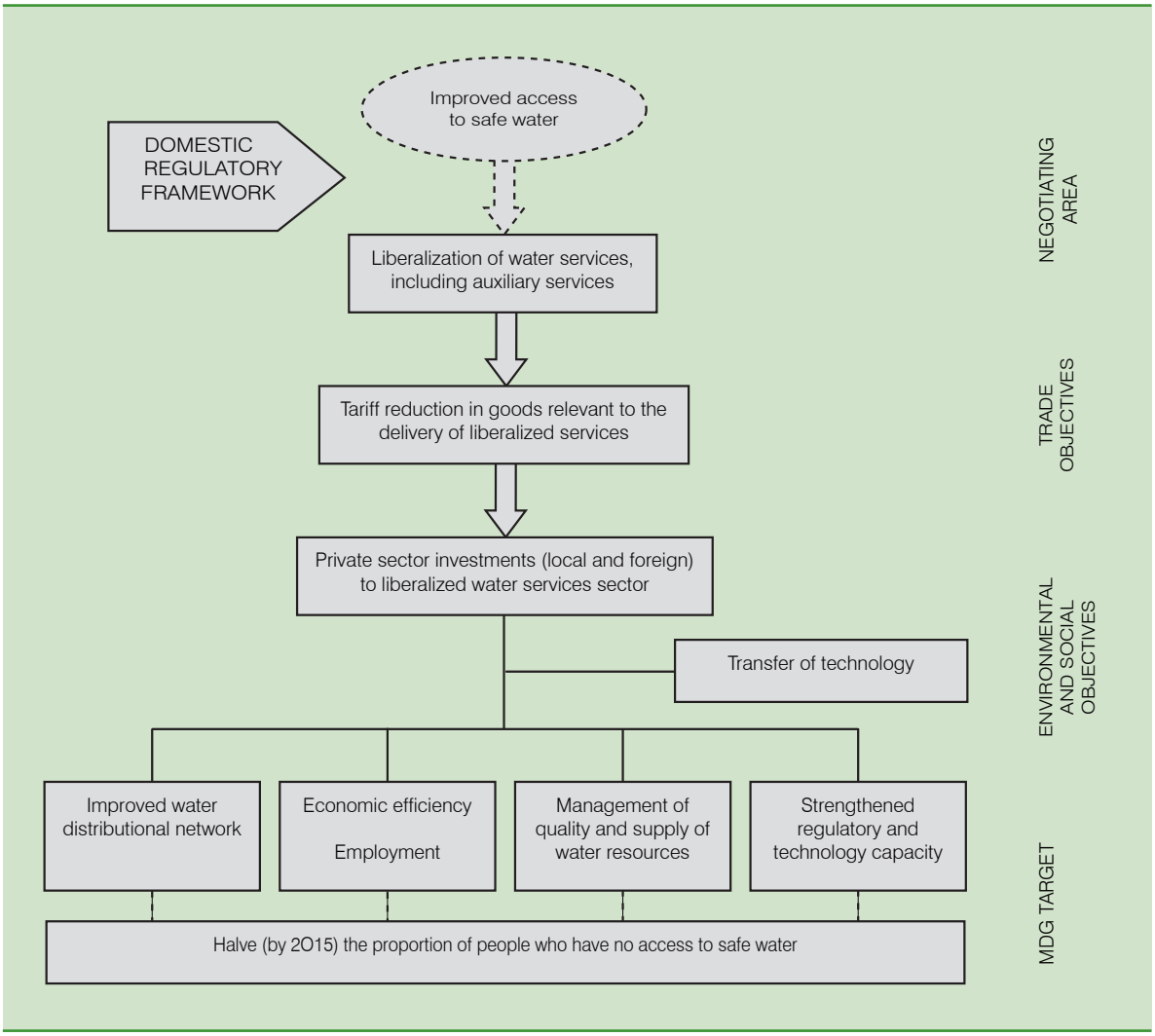
[73] http://www.wto.org/English/tratop_e/serv_e/gats_factfiction8_e.htm (Accessed 20 March 2007).

[74] Norway withdrew its requests concerning water services on the eve of the Hong Kong Ministerial, and the EC in February 2006 excluded from its plurilateral request "water for human use." (Deckwirth, 2006).

[75] Mehta and Madsen (2005).

[76] Steenblik et al (2005).

Figure 1. Applying the EAI approach to water services negotiations.



specifically in order to attain the end-goal of reaching the deprived areas, universal services obligation and the extension of infrastructure networks to such areas are requirements that Members can indicate in their GATS schedules, and in their terms of contract with the provider. In respect of community-managed water supplies, such arrangements can be protected if governments specify a 'horizontal limitation' in their GATS schedule, defining which regions or sub-sectors should be exempted.[77] Members may also limit the scope of the rights granted to private enterprises with certain restrictions and conditions detailed on their schedules provided that these are not discriminatory and comply with national treatment provisions.[78] Foreign suppliers will be subject to the same regulations as the nationals, and the same sanctions under national law if it failed to respect the terms of its contract.[79]

As already emphasized above, the existence of a working domestic regulatory framework is essential prior to undertaking WTO commitments in liberalizing this particular sector, if universal access to water is to be guaranteed. In the context of EGS negotiations, the question arises to what extent these regulatory conditions should also form part of multilateral sectoral negotiations, beyond unilaterally imposed conditions and requirements. It is conceivable to seek appropriate guaranties for participatory decision-making and involvement of consumers[80] and other obligations of service providers, including price

[77] These community-managed schemes are increasingly recognized as an effective means of service provision, particularly for poorer communities, but many do not have the capacity to compete with large-scale suppliers.

[78] Mehta and Madsen (2005).

[79] WTO (2002).

[80] Cf. Morgan (2006) analysing the interface of domestic and international negotiations and dispute settlement in case studies relating to Argentina, and South Africa.

controls and subsidies to poor consumers, in a GATS related instrument. The technique employed with the reference paper on telecommunication comes to mind. Such an instrument could inform the framework for water concessions to be granted. It would address basic conditions with a view to bring about equitable distribution of water. It could entail rules on government procurement. It could address framework conditions for private-public partnerships in the field. It could also provide linkages to international support in managing regulatory powers, possibly by an international body specialising in the field. Given the importance of the resources for basic needs, an International Water Authority or Organisation could be created outside the WTO and involved. The issues need further studies to what extent the international framework may support the development of domestic regulatory authority of local governments with a view to avoid potentially negative effects and to provide technical and administrative assistance in managing water supply systems. It amounts to an interesting area of the emerging global administrative law, requiring a coherent and multilayered approach to governance and decision-making.[81]

2. Goods and related issues

When the specific environmental services that are applicable to the provision of drinking water have been identified, Members can then proceed to identify the goods for which tariff and non-tariff barriers have to be reduced and eventually eliminated. The identification of goods will be according to the conditions proposed for naming eligible products mentioned in the previous section of this paper. Liberalized markets for water services and water-related goods are expected to encourage private sector investments which will bring in the necessary investments to expand existing infrastructure up to the remotest areas, and thus improve access to potable water. Experience shows that liberalization can contribute to increasing foreign direct investment flows in the water services sector, but needs to be accompanied by domestic policy measures which strengthen the business environment for investors.[82] Transfer of technology will be a spill over process, whether passive or active, resulting from specifications and requirements indicated by the Member in it GATS schedules as well as individual contracts with the service provider. This provides inputs into the development of a Member's domestic capacity. In this context, negotiations also will look into specific requirements relating to the protection of intellectual property right, transfer of technology, and the creation of incentives for investment in least developed countries on the basis of Article 66: 2 TRIPs Agreement. Equally, negotiations would need to look into particular requirements relating to subsidy programmes, in particular in support poor urban and rural population.

Regardless of the type of private sector participation, such arrangements are accompanied by increased financial resources, availability of technology and core efficient management. Applying these resources to the delivery of universal access to water and providing access to households at an affordable cost are not conflicting objectives, provided the government for its part has in place a stable and functioning regulatory environment (including provision of subsidies where necessary) which will be able to guarantee that private investments are secure and the providers do not function at a loss.[83] Thus, with proper regulation and enforcement, the liberalization of water services and related goods is expected to result in an improved water distributional network, efficiency in service delivery, employment (because of expansion in operations), management of quality and supply of water resources (resulting in positive health benefits), and improved regulatory and technology capacity.

In conclusion, all these results most certainly will lead to the specific MDG target of providing access to a given proportion of world population being realized within a given timeframe. The example, however, equally shows that liberalisation of water related services only can be undertaken under an effective regulatory framework. Where absent or weak, such a framework in terms of competition policy and law, in particular the prohibition of abuse of dominant positions, needs to be developed prior or in parallel to taking commitments as to the liberalisation of water related services. Much like the reference paper in the field of telecommunications, an agreement on water services would need to address competition issues. In addition, it should provide for technical assistance in bringing about effective regulatory systems and impose disciplines on exporting country industries. Absent such disciplines, EGS negotiations may have to remain limited to liberalisation of goods essential for water supplies under the current list approach.

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81 Morgan (2006).

82 Bisset et al (2003).

83 OECD (2000) lists the following options for private sector participation in the water sector: privatisation/ divestiture, concession, build-operate-transfer (BOT) contract, private lease, public management contract, and service contract.

IX. CONCLUSIONS

Negotiations on environmental goods and services - simply and straightforward called for in Article 31(iii) of the Doha Development Agenda of 2001 - amount to a complex and most controversial undertaking. The basic problem relies in the structure of the industries concerned. Most of the advanced environmentally sound technology rests with industrialised countries. It amounts to a major export interest among themselves and developing countries alike. Developing countries offer a host of environmentally preferable products, yet the potential remains limited with a view to bring about an overall balance and reciprocity of commitments. Thus, listing has been opposed and countered by proposals focusing on particular projects. These proposals, in turn, failed to offer a common ground as they do not entail lasting commitments and entail deviations from WTO principles which cannot be sufficiently justified under current law. This paper suggests developing a new approach building upon tabled proposals, and linking them to the achievement of development goals enshrined in the Millennium Development Goals. It submits the Environmental Area Initiative, which operates in two steps. Firstly, negotiations seek to define a limited number of pertinent MDG goals, based upon which a sectoral initiative in addressing services, goods, intellectual property and other non-tariff barriers will be launched. Secondly, negotiations with a view to reduce trade barriers in relevant services and goods will take place in relevant fora of the WTO under the auspices of the CTE. The task entails high levels of coordination which will be facilitated by a framework Agreement on Environmental Goods and Services. With a view to bring about an overall balance – given the structure of the industry – to focus on environmental services in the first place and to include pertinent goods relevant for the provision of these services. It also suggests expanding negotiations on environmentally preferred goods as a separate track and to include TK and GI based and eco-labelled products. A brief study on applying the model to the MDG goal of enhancing access to clean water both shows the potential and limitation of the approach. Environmental Area Initiatives depend upon the establishment of effective regulatory regimes, in particular competition law and policy, short of which liberalisation of related services is likely to remain controversial and impossible. It should be further studied to what extent these efforts an be supported by disciplines in international law within and without the WTO. At the same time, the example shows the potential of liberalisation for access to water under an EAI for the future. We are convinced that the EAI offers the potential to render a complex process more focused and managed, to bring about a better balance between interests of industrialised and developing countries, and to bridge prevailing and controversial perceptions of WTO Members in the Post Doha Agenda of multilateral trade negotiations.

REFERENCES

Bisset, R. et al. (2003) "Sustainability Impact Assessment of Proposed WTO Negotiations: Environmental Services (with particular reference to water and waste management), The University of Manchester and the Institute for Development Policy and Management. Available at http://trade.ec.europa.eu/doclib/docs/2005/january/tradoc_121223.pdf (Accessed: 28 November 2006).

Carpentier, C.L., K. Gallagher, and S. Vaughan. (2005) "Environmental Goods and Services and the World Trade Organization" Journal of Environment and Development, Vol. 14, No. 2.

Cossy, M. (2006) Determining "likeness"under GATS: Squaring the Circle?, WTO, Staff Working Paper ERSD 2006-08.

Cottier, T., and M. Oesch (2005) "International Trade Regulation: Law and Policy of the WTO, the European Union and Switzerland", Staempfli Publishers, Cameron May: Berne, London.

Cesano, D. and J. Gustafsson, J. (2000). "Impact of Economic Globalization on Water Resources: A Source of Technical, Social and Environmental Challenges for the Next Decade." Water Policy 2 (2000) 213-227.

Deckwirth, C. (2006) "Water Almost out of GATS", Corporate Europe Observatory Briefing. Available at http://www.corporateeurope.org/water/gatswater2006.pdf (Accessed 03 December 2006).

Ferrier, Grant. (2003) "The Environmental Industry and Prospects for Building Capacity in Developing Nations" UNCTAD/DITC/TNCD/2003/3, Geneva. Available at http://www.unctad.org/en/docs/ditctncd20033p2_en.pdf (Accessed: 26 November 2006).

Geloso Grosso, M. (2005), "Managing Request-Offer Negotiations under the GATS: The Case of Environmental Services", OECD Trade Policy Working Papers, No. 11, OECD Publishing. Doi:10.1787/276102368237

Hamwey, R. (2005) "Environmental Goods: Where do the Dynamic Opportunities for Developing Countries Lie?" Available at http://129.3.20.41/eps/it/papers/0512/0512015.pdf (Accessed: 21 November 2006).

Hamwey, R. et al. (2003) "Liberalization of International Trade in Environmental Goods and Services". UNCTAD Background paper for Sub-regional training workshop on the trade and environment issues contained in paragraphs 31 and 32 of the Doha ministerial declaration. Avalaible at http://r0.unctad.org/trade_env/test1/meetings/bangkok4/EGS.pdf (Accessed: 20 November 2006).

ICTSD (2006) "EC, Others Table Request for Liberalization of Environmental Services", BRIDGES Trade BioRes, Vol. 6, No. 4.

Kennett, M. and R. Steenblik (2005) "Environmental Goods and Services: A Synthesis of Country Studies. OECD Trade and Environment Working Paper no. 2005-3. Available at http://www..oecd.org/dataoecd/43/63/35837583.pdf (Accessed 20 November 2006).

Kirkpatrick, C. and D. Parker (2005), Domestic Regulation and the WTO: The Case of Water Services in Developing Countries, 28 World Economy 1491-1508.

Kirkpatrick, C. (2006) "Trade in Environmental Services: Assessing the Implications for Developing Countries in the GATS. Issue Paper No. 3, ICTSD Geneva, Switzerland.

Mehta, L. and B. la Cour Madsen (2005) "Is the WTO After Your Water? The General Agreement on Trade in Services (GATS) and Poor People's Right to Water", Natural Resources Forum 29 (2005) 154-164.

Morgan, B.(2006), Turning Off the Tap: Urban Water Service Delivery and the Social Construction of Global Administrative Law, 17 EJIL 215-246.

OECD (2000) "Environmental Goods and Services: An Assessment of the Environmental, Economic, and Development Benefits of Further Global Trade Liberalization." Available at http://www.oecd.org/dataoecd/43/19/1861110.pdf (Accessed 23 November 2006).

OECD (undated) "The Global Environmental Goods and Services Industry." Available at http:www.oecd.org/dataoecd/11/10/2090577.pdf (Accessed: 24 November 2006).

Steenblik, R. (2005) "Environmental Goods: A Comparison of the APECX and OECD Lists. OECD Trade and Environment Working Paper No. 2005-04. Available at http://www.oecd.org/dataoecd/44/3/35837840.

pdf (Accessed 24 November 2006).

Steenblik, R., D. Drouet, and G. Stubbs (2005) "Synergies between Trade in Environmental Services and Trade in Environmental Goods", OECD Trade and Environment Working Paper No. 2005-01. Available at http://www.oecd.org/dataoecd/21/48/35161237.pdf (Accessed: 24 November 2006).

Stillwell, M. (2007) "Advancing the WTO Environmental Goods Negotiations: Options and Opportunities", Institute for Governance and Sustainable Development, Geneva.

Trecco, O. (2005) "Water and the GATS: Exploring Their Impact on Local Level Partnerships", BPD Occasional Paper, Building for Partnerships. Available at http://bpdws.org/bpd/web/d/doc_106.pdf?statsHandlerDone=1 (Accessed 03 December 2006)

UN Economic and Social Council (2003). Available at http://www.unhchr.ch/tbs/doc.nsf/0/a5458d1d1bbd713fc1256cc400389e94/$FILE/G0340229.pdf (Accessed 03 December 2006).

UNCTAD (2003a) "Managing Request-Offer Negotiations Under the GATS: The Case of Energy Services." Available at http://www.unctad.org/en/docs/ditctncd20035_en.pdf (Accessed 28 November 2006).

UNCTAD (2003b) "Environmental Goods: Trade Statistics of Developing Countries." Expert meeting on definitions and dimensions of environmental goods and services in trade and development, TD/B/COM.1/EM.21/CRP.1, 09-11 July 2003. Available at http://r0.unctad.org/trade_env/test1/meetings/egs/crp.pdf (Accessed 21 November 2006).

UNCTAD (2003c) Trade and Environment Review 2003. Available at http://www.unctad.org/en/docs/ditcted20034a4_en.pdf (Accessed 03 December 2006).

Vaughan, S. (2003) Notes on speech.

Vikhlyaev, A. (2004) "Environmental goods and services: Defining negotiations or negotiating definitions?" Journal of World Trade 38(1) 93-122.

World Trade Organization, various submissions by Members. Available at http://www.wto.org/english/docs_e/docs_e.htm.

WTO (2002) "GATS Fact and Fiction." Available at http://www.wto.org/English/tratop_e/serv_e/gats_factfiction8_e.htm (Accessed 06 December 2006)

Zarrilli, S. (2003) "International Trade in Environmental Services and the Developing Countries" UNCTAD/DITC/TNCD/2003/3. Available at http://www.unctad.org/en/docs/ditctncd20033p2_en.pdf (Accessed: 26 November 2006).