



GATS, Water and the Environment



Implications of the General Agreement on Trade in Services for Water Resources



CIEL and WWF International Discussion Paper, October 2003

This paper was researched and written by Aaron Ostrovksy, Robert Speed and Elisabeth Tuerk of the Center for International Environmental Law (CIEL). The authors benefited from numerous discussions on related issues and are grateful to comments on an earlier version of this paper from Nathalie Bernasconi Osterwalder, Tom Crompton, Suzanne Garner, Richard Holland, Eva Royo Gelabert, Aimee Gonzales, Ellen Gould, Ruth Kaplan, Markus Krajewski, Steve Porter and Keith Tyrell. Special thanks to Mireille Cossy, Pete Hardstaff and John Hilary.

The views in this paper are those of the authors and do not necessarily reflect those of CIEL and WWF.

For comments and/or queries on this paper, please contact:

Elisabeth Tuerk
Staff Attorney
CIEL Europe
15 rue des Savoises
1205 Geneva
tel: +41 22 321 4774
fax: +41 22 789 0500
Email: etuerk@ciel.org

Cover picture Jay Arraich ©2000 www.arraich.com
--

Richard Holland
Policy Advisor - Sustainable Water Use
WWF Living Waters Programme
WWF Netherlands
Boulevard 12
3707 BM Zeist
The Netherlands
tel: +31 30 693 7819
fax: +31 30 691 2064
Email: rholland@wwf.nl

For other publications or more information, please contact:

Sabine Granger
WWF International
Ave du Mont Blanc
1196 Gland, Switzerland
tel: +41 22 364 9012
fax: +41 22 364 8219
Email: sgranger@wwfint.org
Website: www.panda.org/trade

Published October 2003 by WWF- World Wide Fund for Nature

Any reproduction in full or in part of this publication must mention the title and credit the above-mentioned publisher as the copyright owners. Text 2003. All rights reserved.

The material and the geographical designations in this report do not imply the expression on an opinion whatsoever on the part of WWF, concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries.

Acronyms

AB	Appellate Body (WTO)
CBD	United Nations Convention on Biological Diversity
CIEL	Centre for International Environmental Law
CMA	Catchment Management Authority (South Africa)
CTE	Committee on Trade and Environment (WTO)
CTS	Council for Trade in Services (WTO)
EC	European Commission
EIA	environmental impact assessment
EPBC	Environment Protection and Biodiversity Conservation Act 1999 (Australia)
EU	European Union
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
IGO	inter-governmental organisations
MEA	multilateral environmental agreement
NAFTA	North American Free Trade Agreement
NGO	non-governmental organisation
NWA	National Water Act (South Africa)
NWP	National Water Policy 2002 (India)
NWRP	National Water Resources Policy (Brazil)
NWRS	National Water Resource Strategy (NWRS)
SIA	sustainability impact assessment
UN	United Nations
WB	Water Bill 2003 (United Kingdom)
WFD	Water Framework Directive (EU)
WPDR	Working Party on Domestic Regulation (WTO)
WRIS	Water Resources Information System (Brazil)
WRP	Water Resource Plan (Brazil)
WTO	World Trade Organisation
WWF	World Wide Fund for Nature

Contents

Executive Summary	1
Section I Background	4
Section II Water Legislation Review	7
A Overview.....	7
B South African Water Law	9
C EU Water Framework Directive (WFD).....	10
D Proposed Water Legislation in England and Wales	11
E Australian Water Policy.....	11
F Indian Water Laws	12
G Brazilian Water Laws.....	13
Section III The General Agreement on Trade in Services (GATS)	14
A Introduction: An Overview of the GATS	14
B GATS Negotiations: Timelines, Venues and Criticism.....	16
Section IV The GATS and Water: The Link	21
A Introduction.....	21
B Services Covered by the GATS.....	21
C Trade Covered by the GATS.....	23
D Regulatory Measures Covered by the GATS	24
E Entities Covered by the GATS	25
Section V Implications of the GATS for Water Management Policies	27
A Introduction – Framework for Analysis.....	27
B Water Rights: Ownership of Water and the Allocation of Water Rights to Private Entities.....	28
C Avoiding Over-Exploitation: Licenses, Concessions and Permits That Establish Clear Quantitative Limitations on Services Provision.....	30
D Avoiding Over-Exploitation: Licenses, Concessions and Permits That Establish Other Quantitative Caps on Services Provision.	32
E Pollution Control: Licenses, Concessions, Permits and Technical Standards to Regulate Discharge of Pollutants or to Operate Facilities	35
F High Quality Provision of Water-Sensitive Services: Qualification Requirements for Services Providers.....	37
G Water Pricing: Recognizing the True Economic Value of Water in-Licensing Fees and Financial Aspects of Concession Contracts.....	38
H Environmental Impact Assessments (EIAs) and Sustainability Impact Assessments (SIAs): Documentation and Information Required for the Granting of Licenses.....	39
I Land Ownership: Preserving Water by Regulating the Use and Ownership of Land.	41
J Cutting Across all Environmental, Water Preservation and Other Domestic Regulation: The GATS Negotiating Mandate on Domestic Regulation.	41
K Cutting Across All Environmental, Water Preservation and other Domestic Regulation: The GATS National Treatment Obligation.	43
L The GATS Environmental Exception: Can Art. XIV Help?.....	44
Section VI Conclusions and Policy Recommendations	46
A Conclusions	46
B Policy Recommendations.....	50
References	52

Executive Summary

Water is one of the most important elements for the health of an ecosystem. It is essential to all life on earth and is a limiting factor in economic and social development. Globally, freshwater resources are being over-exploited, polluted and degraded. Demands for water, for drinking as well as for development, are increasingly being made on systems which are already near the point of collapse. Water management policies that focus on both sustainable development and sustainable water use are more important than ever before in order to ensure that ecosystems are not permanently damaged.

During the last decade, significant changes in policy have been made in respect to how water is managed and how it is supplied to consumers. These changes have resulted in institutional and legislative reforms, and a range of policy initiatives and instruments.

However, developing international trade law that is compatible with the ability of countries to adopt strong domestic water policies is problematic. Specifically, there are concerns about how international trade rules covering services may constrain domestic regulations protecting and conserving water, wetlands and eco-systems.

While there has been considerable analysis of the consequences that the General Agreement on Trade in Services (GATS) may have for water service provision, particularly with reference to the privatization of water services, far less attention has been paid to the interaction between the GATS and domestic water laws insofar as they relate to resource management and environmental protection.

Most important amongst these are challenges that arise from the inherently different approach water and international trade rules take to policy making. In order to protect water resources, regulators need flexibility to implement adaptive management plans which can respond to changes in environment and use patterns. International trade rules, however, favour legal security and predictability, seeking to “lock in” policy choices once they are established. This is particularly problematic in light of the fact that domestic water laws are in a state of flux.

New trends in domestic water management have emerged in the last few decades. New management tools, such as granting water rights or mitigating water pollution through licensing and technical regulations, are essential to creating ecologically sound and sustainable water management systems. In addition, water can also be managed through quantitative caps on water use or requirements for sustainability impact assessments (SIA).

However, many of these management tools apply to service providers, and in so doing may also affect foreign service providers that aim to supply and consequently trade their services. As a result, these domestic water management policies may be subject to the GATS. There are concerns that the current GATS regime, as well as proposed future rules and commitments, could restrict a WTO Member country’s scope to impose such crucial water regulations. For example, GATS commitments could limit a WTO Member’s ability to set and implement specific standards for pollution discharge or to require SIAs if these measures are found to be a burden on international trade in services.

This paper highlights the following 12 areas where potential for conflict between GATS disciplines and domestic policies to protect and conserve water, wetlands and ecosystems is emerging.

1. The GATS covers a broad range of regulatory entities responsible for water management and conservation issues.

2. The GATS affects policies that regulate the granting of water rights.
3. The GATS market access provision (Art. XVI) prohibits certain policies that aim to avoid over-exploitation of water resources by establishing certain quantitative limitations on service provision.
4. The GATS market access provision (Art. XVI) creates legal insecurity for policies that aim to protect water by establishing quantitative caps either on the water available for economic activity or on the impact that operations of service suppliers have on water.
5. Future disciplines on domestic regulation may limit how regulators establish and verify the necessary professional qualifications for service providers whose activities affect water.
6. Future disciplines on domestic regulation may constrain WTO Members' abilities to use licenses, permits or technical regulations and standards to protect and preserve water, including to regulate discharge of pollutants or to operate facilities.
7. Future disciplines on domestic regulation may constrain WTO Members' abilities to include environmental considerations when setting licensing fees and determining financial aspects of concession contracts in the water sector.
8. Future disciplines on domestic regulation may constrain WTO Members' abilities to require potential license holders to conduct thorough sustainability impact assessments and to furnish the respective documentation.
9. The GATS might be (mis)used to eliminate policies that aim to preserve water by regulating the use and ownership of land with springs.
10. The GATS domestic regulation negotiating mandate (Art. VI.4) may result in future disciplines that unduly constrain regulatory prerogatives across the board.
11. The GATS national treatment obligation (Art. XVII) may unduly constrain regulatory prerogatives across the board.
12. The GATS environmental exception (Art. XIV) constitutes an inadequate remedy for the challenges that the GATS poses for domestic water management.

This paper presents a series of policy recommendations that can address these challenges and help ensure that the GATS does not negatively affect water services by limiting regulatory flexibility and "locking-in" WTO Members to regulatory commitments that might ultimately be detrimental. Because GATS commitments are difficult to amend, policy makers and trade negotiators should begin work immediately, prior to, or in parallel with, agreeing to new rules or accepting new commitments in the current negotiations.

To this end, water policy makers should begin by *raising awareness* about the effect of the GATS on domestic water policies as well as *conducting analyses* (such as a comprehensive, participatory SIA) designed to provide substantive input into trade negotiating positions. Specifically, they should determine what relevant national, sub-national and non-governmental entities are involved in water management processes, analyze which sectors of services trade (for example, water, tourism or energy) may be most affected by domestic water management, and study which national policies to preserve and protect water may be most affected by services trade liberalisation. This analysis should be conducted early enough

to provide substantive input and policy recommendations for their country's negotiating position, as well as to ensure that WTO discussions on assessments are thorough and comprehensive.

Trade policy makers should work to *ensure a transparent negotiating process*. Transparency and participation are essential elements to allow the development of international trade rules that grant sufficient space to domestic regulators to put in place policies to protect and conserve water, wetlands and ecosystems.

Substantive attention to the existing GATS legal framework should include *clarifying or interpreting ambiguities* or *amending existing GATS rules*. Such changes should ensure that,

- the *existing general exceptions* also include a specific exception for measures relating to the protection of the environment and the conservation of natural resources, specifically water;
- the *GATS national treatment obligation* does not prohibit *de facto* discriminatory measures;
- the *GATS market access obligation* effectively allows all policies that aim to preserve and protect water by limiting water input into the production and delivery processes of services. Further, market access obligations should only prohibit measures that have both the effect and forms explicitly defined in Art. XVI of the GATS.

WTO Members should also change the current course of negotiations to increase, rather than constrain, domestic regulatory space for policies that protect and conserve water and wetlands ecosystems. To this end, WTO members should *halt negotiations on controversial disciplines*, such as domestic regulation. In particular, WTO members should,

- refrain from making new national treatment or market access commitments in service sectors which may be affected by water management policies;
- complement existing and future commitments with horizontal conditions or limitations which effectively safeguard the full range of existing and future water management and preservation policies;
- refrain from adopting any additional disciplines on domestic regulation.

New commitments on domestic services should be entered into with caution. Where new disciplines on domestic services cannot be avoided, WTO Members should

- *limit the scope and breadth of future disciplines*;
- *refrain from using language on necessity*;
- *include statements* that the conservation of water, water courses and wetlands – and the protection of the environment and conservation of natural resources in general – are *legitimate national policy objectives*, the effective pursuit of which will not be constrained by international trade rules; and
- ensure that future annexes or disciplines *contain effective safeguards and exceptions* for environmental policies, as well as specific language for water preservation policies.

Much of the GATS is still in development. This makes a clear assessment of its implications and effects difficult but vitally important. Many domestic water laws are also in a state of flux and development. This renders any assessment of possible inconsistencies between the GATS and water policies an even more complex process. However, the fact that many decisions – particularly in the GATS context – have not yet been taken provides a unique opportunity to influence not only the outcome, but to provide policy makers responsible for water, wetland and preservation policy with the flexibility to adopt approaches that they consider most suitable and effective to achieve their goals.

Section I Background

Water is indisputably one of the most precious of all natural resources. It is essential to all life on earth. It is also a limiting factor in economic and social development. Freshwater resources globally are being over-exploited, polluted and degraded and many systems are on the point of collapse. At the same time, pressure has never been greater to provide water for drinking as well as for economic development. Water resource management thus poses one of the great challenges for achieving ecologically sustainable development.

During the last decade, significant changes in policy have been made in respect to how water is managed and how it is supplied to consumers. These have resulted in institutional and legislative reforms, and a range of policy initiatives and instruments.

At same time, defining water for the purposes of international trade law has proven problematic. For example, in the case of the North American Free Trade Agreement (NAFTA), concerns that water would be covered by the rules of an international trade agreement have led to the adoption of a joint public statement by the Parties to NAFTA, to clarify that certain forms of water would not fall within the ambit of NAFTA.¹ Specifically, the statement suggests that, “[w]ater in its natural state in lakes, rivers, reservoirs, aquifers, water basins and the like is not a good or product, is not traded, and therefore is not and never has been subject to the terms of any trade agreement.”²

The debate has not matured to this point in the World Trade Organization (WTO). To date, the question of whether or not water would be covered by the General Agreement on Tariffs and Trade (GATT) has not figured prominently in the trade and environment discourse. However, concerns about how international trade rules may constrain domestic regulations which have been designed to protect the environment have been prevalent, including the public debate about current negotiations to liberalize trade in services.

Concern over the implications of the General Agreement on Trade in Services (GATS) for domestic policy making has given rise to significant analysis of the GATS and its operation.³ Concerns have focused particularly on the significance of the agreement for the provision of essential services – such as health, education and water, raising important aspects of basic human rights. While there has been considerable debate and analysis of the consequences of the GATS for water service provision, particularly with reference to the privatization of water services,⁴ far less attention has been paid to the interaction of the GATS with domestic water

¹ For a comprehensive analysis of this approach see Shrybman, Steven, *The Impact of International Services and Investment Agreements on Public Policy and Law Concerning Water*, (2002).

² “1993 Statement by the Government of Canada, Mexico and the United States”, available at http://www.scics.gu.ca/info99/83067000_e.html#statement. Last accessed on June 12, 2001.

³ For GATS related research see UNHCHR (2000), Economic, Social and Cultural Rights: Liberalisation of Trade in Services and Human Rights, Report of the High Commissioner E/CN.4/Sub.2/2002, (June 2002); For policy inter-linkages between the World Bank, the GATS and investment agreements affecting the provision of water see *Going With the Flow: How International Trade, Finance and Investment Regimes Affect the Provision of Water to the Poor*, CIEL Issue Brief, (2003), <http://www.ciel.org>.

⁴ Tuerk, Elisabeth and Robert Speed. *GATS and Water, A Draft Discussion Paper for the Workshop on Trade and Water*. 3 March (2003), Geneva (forthcoming); Mireille Cossy. *Water Services and the GATS – Selected Legal Aspects, A Draft Discussion Paper for the Workshop on Trade and Water*. 3 March (2003), Geneva (forthcoming); Ellen Gould. *Water in the Current Round of WTO Negotiations on Services*, Canadian Centre for Policy Alternatives Briefing Paper Series: *Investment and Trade*, Vol. 4, No. 1; John Hilary. *GATS and Water: The Threat of Services Negotiations at the WTO, A Save the Children Briefing Paper*, (2003); UN Committee on Economic, Social and Cultural Rights, General Comment No. 15 (2002) The Right to Water (arts.11 and 12 of the International Covenant on Economic, Social and Cultural Rights) E/C.12/2002/11, (November 2002).

laws insofar as they relate to resource management and environmental protection.⁵ This paper seeks to examine these issues.

Section II provides a review of a range of domestic water laws and policies. It commences with an overview of trends in water management, which outlines the key policy shifts that have occurred over the past decade or more. The paper then considers frameworks in place in a range of different countries, drawing out selected elements to focus on those that are most relevant for this paper.

Section III examines the GATS and offers a brief overview of the agreement. It explains what the agreement is, what its key provisions are and how they work, and how the agreement is evolving in current negotiations.

In Section IV, the paper looks at the links between water and the GATS. It describes the type of services relevant to water resources, the notion of trade, the type of regulatory measures and the entities which are, or may be, covered by the GATS.

Section V considers in more detail the potential implications of the GATS for water resource management, and in doing so draws on examples of water policies and laws described in Section II. This section first examines issues surrounding the ownership of water and how the GATS interacts with the allocation of water rights to private entities. It then explores possible implications for policies aiming to achieve certain water management objectives, in particular policies that aim:

- to avoid over-exploitation by using licenses, concessions and permits that establish clear quantitative limitations for service providers extracting or otherwise using water;
- to preserve water, by effectively amounting to quantitative limitations on service provision (for example, placing caps on the amount of water available for service delivery);
- to mitigate water pollution by using licenses, concessions, permits and technical standards to regulate discharge of pollutants or to operate facilities; and,
- to ensure high quality provision of water-sensitive services by using qualification requirements for service providers.

Section V also considers whether GATS constrains regulators in accounting for environmental factors (such as the true, economic value of water) when setting licensing fees and whether it may curtail policies that require SIAs and other documentation before commencing large-scale water projects. After analyzing how the GATS may affect policies that directly concern the regulation of water, it turns to analyze how the GATS may affect policies that aim to preserve water by regulating the use and ownership of land. It then looks at a cross-cutting issue, namely how the GATS national treatment obligation may constrain water preservation policies. Section V concludes by evaluating whether the GATS environmental exception is an adequate tool to remedy the various challenges that the GATS poses for domestic water management.

⁵ Fuchs, Peter and Elisabeth Tuerk. *The General Agreement on Trade in Services (GATS) and future GATS-Negotiations -- Implications for Environmental Policy Makers*, Paper prepared for the German Federal Environment Agency (2001). Available at <http://www.umweltbundesamt.de>; Shrybman, Steven. *The Impact of International Services and Investment Agreements on Public Policy and Law Concerning Water*, (2002); David Waskow and Vicente Paolo B. Yu III, *A Disservice to the Earth: The Environmental Impact of the WTO General Agreement on Trade in Services (GATS)*, <http://www.attac.de/gats/gatsfoee.pdf>.

Section VI contains the conclusions arising from the paper. It starts by discussing systemic differences between the legal frameworks created by the GATS and by domestic water laws; it then outlines the key areas of overlap between water resource management and the GATS and the threats that the GATS could pose for the ability of governments and citizens to manage water resources. Section VI concludes with suggestions for action that could be taken to address these threats.

Section II Water Legislation Review

A Overview

Water management globally has undergone a restructuring over the last decade. This is due, in large part, to the need to incorporate the principles of sustainable development (particularly those arising from the Rio Earth Summit in 1992) into water management practices, combined with attempts to adopt a market based approach towards water supply promoted by the World Bank, among others. Consequently, many domestic water laws are in a state of flux, adapting to evolving scientific evidence and resource management theory as well as to growing environmental and social problems linked to water.

The new wave of domestic water policies and laws shows many common trends. These include the following:⁶

- ***Decentralized and Participatory Management of Water Resources*** – Water policy must be flexible to adapt to changes in watershed conditions and land use patterns. In addition, it must receive input from all affected parties. By decentralizing and localizing water management, a government reduces lag time to respond to changes in water needs. In addition, participatory management ensures that local needs and customs are considered in developing water plans. Finally, decentralized systems provide better access for non-governmental organisations (NGOs) and organized civil society to contribute to the planning process. Since communities and industry are more likely to be interested in the health of their local environment, a decentralized system may lead to a greater importance being placed on ecology and environmental values.
- ***Adoption of the Watershed as a Unit of Planning*** – Using a watershed, river basin, or catchment area, as the central unit for water planning ensures that water users and water sources are treated in one holistic system.⁷ This approach is desirable from an environmental perspective because, in theory at least, it prevents over-allocation or excessive pollution of water. When changes to a use plan are proposed, the changes are considered not only in terms of very local users and sources but also in terms of how the changes will affect the watershed as a whole – ensuring that no more water is allocated than the watershed can reasonably provide.
- ***Equal Consideration of All Water Use Categories***⁸ – Equal consideration of use categories or use functions ensures that, even when demand in one particular use category increases, it will not be at the expense of other uses. Since demand usually increases cyclically in services or human use categories, and rarely in ecological categories, this system ensures that even in high demand situations (such as population explosions or construction of major water-using infrastructure), environmental needs still ought to be given due consideration.
- ***Priority for Water Given to Human, Animal and Environmental Needs in Times of Scarcity*** – Establishing a base “reserve” of water is another means by which

⁶ See generally Sec. de Recursos Hídricos, Gov. do Brasil, National Water Resources Policy of Brazil (2002).

⁷ Catchment-based planning refers to the coordinated planning for use of land and water resources within the entire catchment (i.e., the geographic area that drains to a single point), accounting for both surface water and groundwater, as well as land use activities.

⁸ For situations in which there is not a shortage of water.

emergency water shortages can be quickly addressed and human and environmental health assured. It should be noted that of the listed trends this one could prove to be the most problematic if the system is only partially adopted, for example by giving priority to human and animal (livestock) needs but neglecting environmental requirements.

- ***Granting of Water Rights*** – In this regime, a user receives a permit, license or concession to use water in a given area for a given purpose. There is a spectrum of water rights, ranging from a strict property right protected by a State’s constitution through to a water right that only involves use of the water, and where the actual right to the corpus of the water is retained in the State or the people. From an environmental perspective, water rights can be a valuable tool for regulation if used to regulate water use. However, water rights granted as property rights can be detrimental because they can lead to overuse of water with no means of regulation. In addition, water rights as property rights can be a burden to governments who will have to pay for compensation if they want to alter those rights.⁹
- ***Recognition of Water’s True Value to Society*** – Since water is generally a public good it is often undervalued in the marketplace. Through the use of licensing and fee systems, the cost of using water better reflects the costs of the use to society and the environment. This, in turn, internalizes some of the negative externalities associated with water use, such as pollution and overuse, by those parties using the water. Thus, it can act as an incentive for parties to reduce negative environmental impacts as much as possible. In that context, the ability to raise and lower fees based on the ecological importance of water in a catchment area is vital for this system to work efficiently.
- ***Mitigation of Water Pollution Through Licensing and Technical Regulations*** – Water pollution in the form of effluents, chemicals or drastic temperature change, is one of the major concerns facing water regulators. By requiring all dischargers in a water catchment to have licenses and to build facilities according to minimum technical specifications, water regulators can effectively lower the total amount of pollution in a catchment. By combining this regime with regular monitoring of water quality in different parts of a catchment area, regulators have a powerful tool to mitigate pollution.

While the above trends are distinct to water law and regulation, in reality there is usually no actual body of “water law” in most countries. Water is instead regulated in a number of distinct fields of law. The major fields of law are listed below:

- ***Environmental Protection Law*** – which regulates activities that may harm the environment. These laws can include standards or licensing regimes for the discharge of pollutants into watercourses as well as laws requiring environmental impact statements for activities which could potentially harm water bodies and communities dependant on them. They can also include nature conservation laws which have minimum flow requirements in rivers or waters in protected areas.
- ***Land/ Planning Law*** – which regulates the ownership and use of land. Such regulations can be in the form of land ownership requirements for water access (for example, limitations on foreign nationals or foreign companies) or zoning requirements for

⁹ See generally Holden, P. and M. Thobani. *Tradeable Water Rights: A Property Rights Approach to Resolving Water Shortages and Promoting Investment*, World Bank Policy Research Working Paper (1996).

shorelines or sensitive wetland areas or areas important for flood prevention (for example, limitations on building in floodplains).

- **Public Health Law** – which regulates water quality for human health purposes. These regulations may prescribe minimum standards for water quality for domestic water supply or for bodies of water that may affect human health (for example, water quality in public swimming areas in rivers or lakes). It is important to note, that environmental regulations often use a standard of protecting human health when developing discharge regulations.

The following sections contain an outline of the way these policies and laws have been adopted in various countries.¹⁰ They are not meant to be an exhaustive discourse of a country's water and environmental laws. Instead, each section examines how a specific country has incorporated one or more of the above trends into its domestic regulations, and focuses on those issues most likely to interact with international laws on trade in services.

B South African Water Law

The South African Constitution, through a Bill of Rights, enshrines for all citizens the right to “sufficient” water and requires that the state “take reasonable legislative and other measures...to achieve the progressive realization of [this] right.”¹¹ The Bill of Rights also provides for the right to an environment not harmful to health and requires steps be taken to protect and conserve the environment and to ensure ecologically sustainable development and the ecologically sustainable use of natural resources.¹²

Under the National Water Act (NWA)¹³, the South African federal government is the public trustee of the nation's water resources, but water resources are managed by Catchment Management Authorities (CMAs) on a regional level. Further, the NWA requires the development of a National Water Resource Strategy (NWRS) to implement the requirements of the NWA and Bill of Rights.¹⁴ The NWRS is created in consultation with stakeholders, such as civil society or industry, and then implemented by the CMAs.

The management framework is a catchment-based planning system, which emphasizes community-based rather than centralized regulatory systems.¹⁵ All individual plans must implement the NWRS, and include plans for the allocation of water among existing and future users. Protection of water resources is managed through two approaches: *Resource Directed Measures*, which include classifying water resources and determining objectives for resources, and *Source Directed Measures*, which include setting and requiring “best management practice” standards and conditioning authorization to take water. The NWA also grants the catchment management authority directive powers to require water users to act to prevent or remedy pollution.

¹⁰ The paper has endeavored to consider laws and policies from a range of different countries, aiming to provide a balanced selection in terms of their level of development and their geographical location.

¹¹ Constitution of the Republic of South Africa, § 27. Available at: <http://www.gov.za/constitution/1996/96cons.htm>.

¹² Constitution of the Republic of South Africa *Id.* at § 24. Available at: <http://www.gov.za/constitution/1996/96cons.htm>.

¹³ National Water Act, 1998, Bill 36-98 (GA). Available at: http://www.dwaf.gov.za/Documents/Legislature/nw_act/NWA.pdf.

¹⁴ *Id.* at National Water Act (No 36 of 1998), § 5. The Proposed National Water Resource Strategy, August 2002 is available at: <http://www.dwaf.gov.za/Documents/Policies/NWRS/Default.htm>.

¹⁵ *The Water Law Review Process: The Philosophy and Practice of Integrated Catchment Management: Implications for Water Resource Management in South Africa*. Department of Water Affairs and Forestry, Water Research Commission (1996). Available at: http://www.dwaf.gov.za/Dir_WQM/docs/Pol_WaterLawReviewProcess.rtf.

The Minister of Water Affairs and Forestry retains control of a small percentage of each catchment area, collectively known as “the Reserve”. This water is intended for basic human and ecological needs in times of water shortage and cannot be utilized for any other purpose. The NWA also allows the Minister to write technical specifications for waterworks, create qualification standards for persons designing, constructing or operating waterworks, prescribe standards for discharges, and determine methods for allocating water rights.

Under the NWA, licenses are required for all types of water use, save certain specific exceptions like domestic purposes or watering stock. The NWA recognizes a number of different types of water use including taking or storing water or disposing waste into a water resource. When granted, water licenses are specific in terms of the licensee, use, location and specific period of time (no more than 40 years) and they must be reviewed at least every five years. If the license must be changed to allow more water for the Reserve, to rectify an over-allocation, or to rectify an unfair or disproportionate water use, the government does not have to pay compensation to the licensee.¹⁶

When amending licenses in a given catchment area, all licenses must be treated equitably. A licensee may be entitled to compensation where the review “severely prejudices the economic viability of any undertaking in respect of which the license was issued.” However, again, the government does not need to pay compensation for an adjustment to supplement the Reserve, to rectify over-allocation, or to rectify disproportionate water use.¹⁷

C EU Water Framework Directive (WFD)

The EU Water Framework Directive (WFD)¹⁸ establishes a framework for the protection and management of water resources. Broadly speaking, the purpose of the directive is to protect water resources by setting objectives for “good status”, including good ecological status, to be achieved for all water, promoting sustainable use of water, and reducing the pollution of water resources.

The Directive requires States in the EU to manage resources at a river-basin level, even where river basins span national borders. “River basin management plans” must be developed and subsequently updated every 6 years. In addition, the WFD emphasizes public participation and transparency as a means of ensuring easier enforcement of regulations. The Directive includes environmental objectives and all States are required to achieve a “good” status for their water by 2015.¹⁹

The WFD regulates water quality both by setting water quality standards for a given catchment area and by placing limits on discharges through technology driven source-based controls. In addition, the WFD emphasizes the need to set prices for water use and extraction which accurately reflect the true costs to society, including environmental and other non-pecuniary costs.

¹⁶ See *Supra* note 11 §NWA, section 22(7).

¹⁷ *Id.* NWA, § 49.

¹⁸ *Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy* (2000). Available at: http://europa.eu.int/comm/environment/water/water-framework/index_en.html.

¹⁹ The WFD defines “good” differently depending if the water is surface or ground water. For surface water, there are two standards, “good ecological status” and “good chemical status”. For ground water, “good” generally means no chemical pollution whatsoever. To date, few actual standards have been set for either ground or surface waters.

The Directive repeals a number of existing EU Directives,²⁰ and will operate alongside a number of other Directives.²¹ An example of the latter is the new Directive on groundwater protection, which has recently been released by the European Commission (EC).²² The new Directive would require States to establish “EU groundwater common indicators” to be used as a benchmark for assessing groundwater quality.

The WFD includes an extended timetable for its implementation.²³ The current phase of its implementation is the transposition into national frameworks, which is to be completed by 22 December 2003.

D Proposed Water Legislation in England and Wales

England and Wales are in the process of transposing the WFD into their domestic laws.²⁴ Many aspects of the WFD can be implemented through secondary legislation (that is, without the need for changes to primary legislation) and the raising of existing standards. However, primary legislative changes are necessary in some areas to provide government with the power it needs to meet the requirements of the WFD. New legislation, the Water Bill 2003 (WB), was introduced into parliament in February 2003.²⁵ The Bill amends the framework established by the Water Resources Act 1991 and the Water Industry Act 1991.

Under the WB, a license would be required to extract over 20 cubic meters of water per day from a catchment area, with certain exemptions. All new licenses would be time limited and old licenses not containing a time limit would be curbed after 2012 with no compensation payable if the extraction results in significant environmental damage. In addition, the UK Environment Agency could require extractors to enter into water management arrangements.²⁶

The WB also amends the Water Industry Act 1991 requiring water companies to prepare drought plans and water resource management plans. In addition, the WB creates licensing provisions allowing for competition within the water supply industry.

E Australian Water Policy

The Australian national government (Commonwealth) relies heavily on its external affairs power to enact environmental legislation, most important of which is the *Environment Protection and Biodiversity Conservation Act 1999* (‘EPBC Act’).²⁷ The EPBC Act establishes a referral, assessment and approvals process for activities likely to have a significant impact on matters of “national environmental significance.” The Act also provides

²⁰ For example, Standards for Protecting Drinking Water (75/440/EEC and 79/869/EEC); Groundwater (89/68/EEC); Dangerous Substances Discharged into the Aquatic Environment (76/464/EEC).

²¹ For example, Urban Waste Water Treatment Directive (91/270/EEC); Integrated Pollution Prevention and Control Directive (96/61/EC).

²² Commission of the European Communities, Proposal for a Directive of the European Parliament and of the Council Establishing Strategies to Prevent and Control the Pollution of Groundwater, (2003). Available at: <http://www.environmentdaily.com/docs/30225a.doc>.

²³ The timetable is included in the WFD, but is available in a summary form at: <http://europa.eu.int/comm/environment/water/water-framework/timetable.html>.

²⁴ Department for Environment, Food and Rural Affairs, (2002) *Directing the Flow – Priorities for Future Water Policy*, (2002). Available at: <http://www.defra.gov.uk/environment/water/strategy/index.htm>

²⁵ Water Bill, introduced in the House of Lords, February 19 2003. A copy of the Bill is available at: <http://www.publications.parliament.uk/pa/ld200203/ldbills/036/2003036.htm>.

²⁶ Specifically, the Agency could condition the granting of extraction licenses on the extractor entering into further commitments for the management of water extracted.

²⁷ Environment Protection and Biodiversity Conservation Act (1999) (Austl.). Available at: <http://scaleplus.law.gov.au/html/pasteact/3/3295/top.htm>.

for the identification of “key threatening processes” and for the preparation of various management plans, including recovery plans, threat abatement plans and wildlife conservation plans.²⁸

Australia’s water reform agenda has been driven by the federal government as part of the National Competition Policy. This policy, so far as it relates to water, is underlined by requirements for changes to water pricing, the establishment of secure, tradeable water entitlements, and the allocation of water for the environment.²⁹

In pursuit of this goal, Australia has implemented a catchment-based water planning process, culminating in the development of catchment management plans. Within the catchment plans, Australia has introduced fees for water use (to be paid by services providers), in some instances increasing over time to the level of full-cost recovery. In addition, tradable water licenses not attached to land create a market whereby the actual costs to society of water use are better reflected. Water licenses are guaranteed for a set period of time (between 5 and 10 years) and changes to a license can constitute a “taking”, requiring compensation, unless the change arises from review at the end of a license period.

Regulation of discharges into watercourses is generally covered by separate environmental protection legislation, with licensing requirements for would-be polluters and standards prescribed in terms of permitted pollution levels.³⁰

F Indian Water Laws

The Indian Constitution divides responsibility for water resources between the national government (the Union) and the states. The Union is responsible for “regulation and development of inter-State rivers and river valleys to the extent ...declared by Parliament by law to be expedient in the public interest.”³¹ Default responsibility then lies on the State governments, who are responsible for “water supplies, irrigation and canals, drainage and embankments, water storage and water power...” subject to the powers of the Union.³² In Delhi, for example, Delhi Jahl Board is responsible for supplying potable water and sewage services. The board is a statutory board and has a wide range of powers, which allow it to install infrastructure, provide water services and restrict the use of water (such as for health reasons).³³

The National Water Policy 2002 (NWP)³⁴ includes recommendations for establishing a management system based on river basins as well as improved information gathering about these areas to improve water resource planning. As well, the NWP creates guidelines for water projects and the development of groundwater reserves. Public participation is encouraged at all levels of water policy creation.

²⁸ *Id.*

²⁹ National Competition Council, The policy is contained in the agreement of the Council of Australian Governments on Water Reform (1994). Available at:

<http://www.ncc.gov.au/publication.asp?publicationID=99&activityID=39>.

³⁰ *See for example* Environment Protection Act (1994) (Austl.); Environment Protection Act (1970) (Austl.); Protection of the Environment Operations Act (1997) (Austl.).

³¹ The Constitution of India, Art. 246 and Schedule 7, List I, entry 56.A, available at:

<http://alfa.nic.in/const/a1.html>.

³² The Constitution of India, Schedule 7, List II, entry 17(2002). Available at:

<http://alfa.nic.in/const/a1.html>.

³³ Delhi Jahl Board Act (1998)(India). Available at: <http://www.delhijalboard.com/act.htm>.

³⁴ Ministry of Water Resources, National Water Policy (2002). Available at: <http://wrmin.nic.in/policy/nwp2002.pdf>.

G Brazilian Water Laws

Brazil, through its National Water Resources Policy (NWRP), emphasizes decentralization of water management. The NWRP has six administration instruments: Water Resource Plans, classification of water bodies into preponderant uses, the granting of water use rights, charging service providers for water used, the National Water Resources Information System, and compensation to counties for man-made floods. These tools create a system whereby users, organized civil society and NGOs can have greater influence on the policy making process.

Brazil's basic unit of regulation is the Water Resource Plan (WRP). WRPs are created for catchment areas, for states, and for the nation as a whole. Within each WRP bodies of water are classified according to the most demanding use. This use is then regulated by granting water-use rights. All grants are subject to the priorities for water use for each individual body of water set out in the WRP. Fees are charged for the water rights to ensure recognition of water as an economic good, to encourage efficient use of water, and to fund the WRPs.

The entire system is monitored by the National Water Resources Information System (WRIS). The goal of the WRIS is to collect, standardize and disseminate information on the quality and quantity of water resources in Brazil, thereby ensuring a holistic view of the Brazilian system.

Section III The General Agreement on Trade in Services

A Introduction: An Overview of the GATS

The GATS is an international agreement, forming part of the legal framework of the WTO.³⁵ It entered into force in 1995 and prescribes rules for international trade in services. It aims to increase trade in services by providing transparency in, and the progressive liberalisation of, services markets. It establishes a framework for WTO Members to access the services markets of other WTO Members by setting certain limits on the way in which the provision of services can be regulated.

The GATS is a legally binding agreement. Any country which fails to honour its obligations under the agreement may be subject to action brought by an aggrieved country under the WTO dispute settlement system, which has compulsory jurisdiction over all WTO Members.

The GATS applies to all service sectors, including services related to transport, construction, water supply and sewage, health, education, communications and tourism. These services can have major environmental impacts, particularly in terms of energy consumption and waste production.

The GATS does not apply to services supplied “in the exercise of governmental authority”.³⁶ However, the definition of what is supplied in the “exercise of governmental authority” is both narrow and ambiguous, and there are concerns that this provision may only exclude a limited number of governmental or other regulatory activities.³⁷

The GATS recognizes the following four “modes” of services trade:

- Mode 1 - **Cross-Border Supply** – Services supplied from one country to another (such as telemedicine or consultancy, including by way of email or international telephone calls);
- Mode 2 - **Consumption Abroad** – Consumers using a service in another country (such as tourists);
- Mode 3 - **Commercial Presence** – Foreign companies setting up in another country (such as a foreign bank setting up a subsidiary branch);
- Mode 4 - **Presence/ Movement of Natural Persons** – Individuals travelling to another country to provide a service (such as consultants).³⁸

The GATS covers “measures...affecting trade in services”.³⁹ These include regulatory measures taken by federal, state and local administrations, as well as those taken by non-

³⁵ For a comprehensive analysis of the GATS and its legal aspects, see Markus Krajewski, *The Right to Regulate and Obligation to Liberalise – The Impact of the General Agreement on Trade in Services (GATS) on National Regulatory Autonomy*, London: Kluwer Law International (forthcoming 2003).

³⁶ GATS, Art. I, 3(b).

³⁷ For a legal analysis of this provision, see generally Markus Krajewski, *Public Services and the Scope of the GATS*, a CIEL Research Paper (2001). Available at <http://www.ciel.org>. See also Markus Krajewski, *Public Services and Trade Liberalization: Mapping the Legal Framework*, *Journal of International Economic Law* 6(2), 341-367 (2003). It is interesting to note that by now, even proponents of the GATS have acknowledged the limited nature of Art. I. Consequently, Members are currently trying to change their existing commitments to include a broad horizontal limitation that effectively excludes public utilities or public services from the scope of their commitments totally.

³⁸ GATS, Art. I, 2.

³⁹ *Id.* at Art. I, 1.

governmental bodies exercising delegated governmental authority.⁴⁰ WTO Members must ensure that any domestic measures that “affect trade in services” are consistent with the rules (or “disciplines”) under the GATS. These rules include *general* as well as *specific obligations*.

General obligations, which apply to all WTO Members and all services sectors, include:

- ***Most-Favoured-Nation Treatment*** – this is one of the principles of non-discrimination and requires that all services or service suppliers of all trading partners are treated equally, and that the services or service suppliers of one trading partner are not favoured over those of another;⁴¹ and
- ***Transparency*** – this requires WTO Members to publish their domestic laws and other rules that affect trade in services.⁴²

In addition to these *general obligations*, the GATS includes so-called *specific obligations*. These only apply to services sectors in which a WTO Member “enters into a specific commitment”. The GATS provides a framework for negotiations between WTO Members over what services they will subject to these specific obligations. This system allows governments to decide, on a case-by-case basis, in which services sectors (or sub-sectors) and for which modes of supply they wish to be bound. In theory, this “bottom-up” approach to making commitments grants flexibility to WTO Members in defining their own services trade regimes.⁴³

The specific commitments of individual WTO Members are included in each country’s schedule of commitments, which form an integral part of the GATS. The specific obligations to which WTO Members can commit are:

- ***Market Access*** – once a country commits to allowing full and unconditional market access (in a specific services sub-sector and mode of supply), the GATS prevents it from placing limits on, amongst other things, the number of service providers, the type of legal entities that may supply a service, or the participation of foreign capital;⁴⁴ and
- ***National Treatment*** – once a country commits to granting full and unconditional national treatment, the country is required to treat foreign services and service suppliers no less favourably than domestic services and service suppliers.⁴⁵

When making specific commitments, a country may subject the application of the GATS rules to certain conditions or limitations. For example, a country may include a limitation on

⁴⁰ *Id.* at Art. I, 3(a).

⁴¹ *Id.* at Art. II.

⁴² *Id.* at Art. III.

⁴³ Recently, this theoretical flexibility has increasingly been questioned. *For example, see* Peter Hardstaff, *The “Flexibility” Myth: Why GATS is a Bad Model for a new WTO Investment Agreement*, paper to Seminar on WTO Investment Agreement, Geneva, 29 March 2003.

⁴⁴ GATS, Art. XVI.

⁴⁵ *Id.* at Art. XVII. Note that the GATS national treatment obligation includes a prohibition on both *de jure* and *de facto* discrimination. This means that even measures which on their face do not discriminate between foreign and domestic service suppliers (*de jure* discrimination), but which in effect create disadvantages for foreign suppliers (even if that is not the intention) (*de facto* discrimination) are inconsistent with the national treatment provision. *See* Werner Zdouc, *WTO Dispute Settlement Practice Relating to the GATS*, JIEL (Journal of International Economic Law), (1999); *see also* Peter Fuchs, Elisabeth Tuerk, *The General Agreement on Trade in Services (GATS) and future GATS-Negotiations -- Implications for Environmental Policy Makers*, Paper prepared for the German Federal Environment Agency (2001). Available at <http://www.umweltbundesamt.de>.

market access retaining its right to require that foreign ownership in financial services providers not exceed a specific threshold. Similarly, a WTO Member can enter into national treatment commitments for transport services, but still retain its ability to provide subsidies to domestic service suppliers only. However, it is crucial that this “condition or limitation” is contained in the country’s schedule.

Once a country commits itself in a specific service sector it is effectively prevented from rescinding that commitment. While technically the GATS includes provisions allowing a party to withdraw a commitment, there are compensation requirements (in terms of granting market access in another area) attached to such a withdrawal and in practice this mechanism is unlikely to be used frequently.⁴⁶

There are also some rules on domestic regulation that already apply in sectors where a WTO Member has undertaken specific obligations, either in market access or national treatment. For example, this is the case for the obligation to ensure that all measures of general application affecting trade in services are administered in a reasonable, objective and impartial manner.⁴⁷

To date, the GATS has had only limited legal effect. This is because it has mainly been applied through its general obligations and it contains relatively few specific commitments entered into by countries. In addition, many of the specific commitments only represent so-called “stand-still commitments”, essentially confirming pre-existing levels of openness in a schedule, rather than providing “new” market access. However, WTO Members are currently negotiating increases in the number of specific commitments, which will expand the application of the GATS specific obligations to more sectors and modes of supply.⁴⁸ In addition, WTO Members are negotiating new, possibly *general*, rules on services trade.

B GATS Negotiations: Timelines, Venues and Criticism

WTO Members conduct the GATS negotiations under the umbrella of the Doha Agenda.⁴⁹ For the so-called request-offer negotiations, the Doha Declaration required WTO Members to table initial requests by end of June 2002 and initial offers by end of March 2003. In addition, Members are negotiating new “rules” for trade in services. These negotiations include the development of disciplines for “trade distortive subsidies”,⁵⁰ an “emergency safeguards

⁴⁶ While the WTO Secretariat points to the flexibility granted by this mechanism, (*see GATS – Facts and Fiction*, available at: http://www.wto.org/english/tratop_e/serv_e/gats_factfiction_e.htm), civil society groups have pointed to the practical limitations of this system (*see* Jessica Woodroffe and Clare Joy, *Out of Service: The development dangers of the General Agreement on Trade in Services* (March 2002)). It remains to be seen how easy it will be for WTO Member to successfully use this process. Currently, the European Communities is considering various options to withdrawing the existing commitments of its most recently acceded Members.

⁴⁷ GATS, Art. VI.1

⁴⁸ In that context, WTO Members are also negotiating the elimination of many of the above described conditions and limitations.

⁴⁹ *See* WTO, Ministerial Declaration, Ministerial Conference Fourth Session, Doha 9-14 November 2001, para. 15, WT/MIN(01)/DEC/W/1, 14 November, (2001). For an analysis of the negotiating developments from a developing country perspective, see Elisabeth Tuerk and Mina Mashayekhi, *The WTO Services Negotiations: Some Strategic Considerations*, Trade-Related Agenda, Development and Equity, Occasional Papers 14, South Centre, (January 2003), for an analysis of the negotiating developments from a developing country perspective.

⁵⁰ GATS, Art. XV.

mechanism”,⁵¹ “government procurement”,⁵² and a mandate for developing future disciplines for domestic regulation.⁵³

Work on domestic regulation is perhaps the most controversial of these negotiating areas. The GATS provision on domestic regulation provides a negotiating mandate to develop future disciplines to ensure that domestic regulation of services does not constitute a barrier to trade. Under this mandate, WTO Members are negotiating international rules to ensure that measures *relating to* qualification requirements and procedures, technical standards, and licensing requirements are “not more burdensome than necessary”.⁵⁴ These negotiations give rise to concern for two reasons.

First, there are current discussions to include a so-called “necessity” or “proportionality test”⁵⁵ into any future disciplines. There are fears that a necessity test would effectively allow WTO tribunals to “second-guess” domestic regulatory choices.⁵⁶ A recent interpretation allows trade tribunals to judge the *legitimacy* of the policy goal in question when applying a necessity test that includes an open-ended list of “legitimate objectives”, which many of them do.⁵⁷ This is particularly problematic, as some of the necessity tests do not explicitly name policy objectives such as the conservation of water, wetlands and eco-systems. In addition, earlier interpretations of necessity tests used criteria that have proven hard to satisfy, including the requirement that the measure in question is the one (which a country could reasonably be expected to take) that “entails the least degree of inconsistency with other GATT provisions.”⁵⁸ These fears are compounded by the fact that the language used in Art. VI.4. of the GATS incorporates new concepts, such as “not more burdensome than necessary”, which potentially include even stricter standards.

Second, these negotiations may result in the establishment of *a priori* transparency disciplines. In that case, governments may be required to notify the WTO of draft national regulations, allow other trading partners to comment on these draft regulations and take these comments into consideration in their respective domestic regulatory decision-making process.⁵⁹ Both elements may result in significant constraints for domestic regulatory prerogatives.⁶⁰

⁵¹ *Id.* at Art. X.

⁵² *Id.* at Art. XIII.

⁵³ *Id.* at Art. VI.4.

⁵⁴ *Id.* at Art. VI.

⁵⁵ See European Communities; Domestic Regulation: Necessity and Transparency, para. 17, S/WPDR/W/14, (May 1, 2001); (hereinafter EC Proposal on Necessity).

⁵⁶ Howse, Robert and Elisabeth Tuerk, *The WTO Negotiations on Services: The Regulatory State Up for Grabs*; Canada Watch, Vol. 9, No. 1-2, (September 2002); Special Double Issue – From Doha to Kananaskis: The Future of the World Trading System and the Crisis of Governance; York University Centre for Public Law and Public Policy and the Robarts Centre for Canadian Studies of York University; See also Maxine Kennett, Dr. Jan Neumann, Elisabeth Tuerk, *Necessity, Proportionality and Balance*, CIEL Issue Brief, forthcoming 2003, at <http://www.ciel.org>.

⁵⁷ This statement was made with respect to the reference of “legitimate objectives” as contained in Art. 2.4 TBT. Having established the linkages between language used in Art. 2.4 TBT and Art. 2.2 TBT, the AB stated “...the second part of Article 2.4 implies that there must be an examination and a determination on the legitimacy of the objectives of the measures”, *EC – Trade Description of Sardines* (hereinafter “*EC – Sardines*”), AB Report WT/DS231/AB/R, para 286.

⁵⁸ *US – Section 337 of the Tariff Act of 1930*.

⁵⁹ WTO, 2000: Communication from the United States, Working Party on Domestic Regulation; GATS Article VI.4 *Possible Disciplines on Transparency in Domestic Regulation*, S/WPDR/W/4, (3 May 2000). Note that – having faced stiff resistance in multilateral discussions – the United States – in a sub-subsequent communication – essentially stopped short of referring to international prior comments procedures any more. See Communication from the United States, Council for Trade in Services, Special Session, Transparency in Domestic Regulation, S/CSS/W/102 (July 13, 2001). It remains

As mentioned, many of the GATS rules and disciplines – including individual WTO-Member’s commitments in specific services sectors – are still in formative stages. Thus, there are serious concerns that these negotiations will create new rules and obligations that threaten governments’ and citizens’ abilities to appropriately manage their water resources. Specifically, Japan and the EC recently proposed disciplines to the WTO’s Working Party on Domestic Regulation (WPDR) that could have significant implications for domestic water regulation and environmental protection.⁶¹ Section V of this paper explains such potential threats in more detail.

On the other hand, the fact that the GATS legal framework is not yet clearly established and that negotiations are not completed presents an opportunity for water management policy makers to provide thoughtful intervention in the negotiating process to prevent possible threats (such as those described in Section V) from taking place. In order to prevent potential threats to regulatory prerogatives, it is important for water management policy makers to have a clear understanding of the different venues and time frames for decision making related to liberalization of trade in services.

Decision-making begins at the national level and progresses to multilateral/international levels. WTO Members first formulate and design their individual countries’ positions mostly in domestic inter-ministerial coordination processes. Subsequently, they negotiate these positions at the multilateral/international level in the WTO. In the case of the European Commission, the EC’s Directorate General Trade negotiates on behalf of the 15 Member States in the WTO. The EC’s joint position is developed by its Member States and the European Commission in the “133 Committee” in Brussels.

Participation in WTO negotiations is limited to each WTO Member’s trade negotiating delegation. Although this delegation can include non-trade ministries, water policy makers can most realistically intervene at the national level. A similar but slightly different situation arises for inter-governmental organizations (IGOs) with regard to multilateral environmental agreements (MEAs). MEAs to date do not have observer status at the WTO that would allow them to participate in, or even follow the negotiations. However, MEAs that address issues related to water and wetlands may have important stakes in the current GATS negotiations. The Ramsar Convention⁶² and the Convention on Biological Diversity (CBD)⁶³ are cases in point.

unclear, however, what is the nature and extent of the transparency requirements the United States have included in their initial market access requests.

⁶⁰ Fuchs, Peter and Elisabeth Tuerk, *The General Agreement on Trade in Services (GATS) and Future GATS-Negotiations -- Implications for Environmental Policy Makers*, Paper prepared for the German Federal Environment Agency (2001). Available at; <http://www.umweltbundesamt.de>.

⁶¹ Communication from Japan, WTO Working Paper on Domestic Regulation; Draft Annex on Domestic Regulation, Job(03)/45 (March 2003), revised May 2003 (hereinafter Japanese Draft). Communication from the European Community and Its Member States, WTO Working Party on Domestic Regulation; Proposal for Disciplines on Licensing Procedures, S/WPDR/W/25 (July 2003)(hereinafter EC Proposal on Licensing). See also EC Proposal on Necessity *supra* note 54.

⁶² The Ramsar Convention, also referred to as “Convention on Wetlands” effectively covers all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. The Convention entered into force in 1975 (adopted in Ramsar, Iran in 1971) and as of 1 May 2003 has 136 Contracting Parties. Today, more than 1280 wetlands have been designated for inclusion in the List of Wetlands of International Importance, covering some 108.7 million hectares (1.87 million km²), more than the surface area of France, Germany, and Switzerland combined. Available at <http://www.ramsar.org>.

⁶³ At the 1992 Earth Summit in Rio de Janeiro, world leaders agreed on a comprehensive strategy for "sustainable development" -- meeting development needs in a way that preserves resources and ecology for future generations. One of the key agreements adopted at Rio was the Convention on Biological Diversity (CBD). The Convention establishes three main goals: the conservation of biological diversity,

In the WTO, services negotiations take place in various bodies and modes, most importantly the multilateral and bilateral negotiating mode. While the former are conducted amongst more than 145 WTO Members, the latter are conducted between two negotiating partners. In these bilateral request-offer negotiations, WTO Members deepen their specific commitments under the GATS market access and national treatment provisions. Yet, WTO Members report on progress in these negotiations to the multilateral discussions in the Special Sessions of the Council for Trade in Services (CTS). Other multilateral negotiations taking place in the formal and informal sessions of the various subsidiary bodies (for example, the Working Party on Domestic Regulation or the Working Group on GATS Rules) also report back to the CTS Special Sessions.

The most important timelines for trade in services that were established in the Doha Declaration are as follows:⁶⁴

- 30 June 2002 – initial request for the market access phase submitted;
- 31 March 2003 – initial offers for the market access phase submitted;
- end of 2004 – conclusion of services negotiations as part of the Doha Agenda.

Other timelines are included the Negotiating Guidelines and in the work programs of the subsidiary bodies where services rules are being negotiated. Among these, the sequencing between multilateral rule-making and bilateral request-offer negotiations is most important for this paper. Specifically, paragraph 7 of the Negotiating Guidelines sets out that WTO Members shall aim to *complete* negotiations on domestic regulations, government procurement, and subsidies prior to conclusion of the market access negotiation (emphasis added).⁶⁵

It is important to note that WTO timelines, including those for the conclusion of the Doha Round of negotiations, are not set in stone. In the run-up to the Fifth WTO Ministerial Conference in Cancun⁶⁶ for example, WTO Members have already missed a series of deadlines. Similarly, many WTO Members have submitted their requests or offers later than suggested, or they have not yet submitted any negotiating documents.

Thus, with negotiations currently underway, water policy makers have a chance to influence negotiating outcomes. In the request-offer phase, for example, WTO Members have only *begun* to submit initial negotiating positions.⁶⁷ These initial requests and offers are now subject to bilateral bargaining. In theory, subsequent versions of a country's negotiating position (those that change through the course of bilateral bargaining) should be developed in consultation with stakeholders in national capitals. The same applies to multilateral rule-making negotiations. The fact that in some areas of multilateral negotiations there are first-draft disciplines on the table does not mean that these will be the outcome of the negotiations. Rather, these draft disciplines may form the basis of discussion at the multilateral level and consequently also the national level. Water management policy makers, when aiming to change the course of negotiations through their work at the national level, should carefully follow the development of WTO services negotiations at the multilateral and bilateral levels.

the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources. Available at www.biodiv.org/biosafety/.

⁶⁴ See WTO, Ministerial Declaration, Ministerial Conference Fourth Session, Doha, para. 15, WT/MIN(01)/DEC/W/1 (November 2001).

⁶⁵ See WTO, Guidelines and Procedures for the Negotiations on Trade in Services, S/L/93, 29 (March 2001).

⁶⁶ The Fifth Ministerial Conference will take place in Cancun, Mexico, 10-14 September 2003.

⁶⁷ Note that even the Doha Declaration stresses that the suggested time lines are for the submission of *initial* negotiating documents.

Overall, the WTO negotiating process has been subject to severe criticism.⁶⁸ Central amongst this criticism is the claim that WTO services trade negotiations lack transparency and do not allow stakeholders to participate effectively. Given the broad implications a country's GATS commitments have upon its regulatory freedom to enact policies aimed at attaining legitimate objectives, depriving the public of access to a country's negotiating position seems fundamentally undemocratic. While some WTO Members have agreed to make initial offers public, this is not the case for most Members and almost all deny public access to their initial requests.⁶⁹ Similarly, currently discussed draft disciplines (such as those in the area of domestic regulations) were issued as an informal, restricted document, making it difficult for the public to even discover its existence.

Another central point of criticism is the inherently imbalanced nature of the negotiating process, putting already resource-constrained developing countries at a further disadvantage. The bilateral request-offer process weakens developing countries' bargaining power by exposing them separately to bilateral pressure from their stronger WTO negotiating partners.⁷⁰

Some also criticize the time frames of current negotiations. The tight time frame prevents WTO Members from conducting a proper assessment of the effects of specific commitments to liberalise services trade before creating internationally legally binding commitments.⁷¹ The tight time frame also limits opportunities for WTO Members to thoroughly consult domestic stakeholders.

Thus, the way current GATS negotiations are undertaken clearly poses significant procedural challenges for water policy makers. Nevertheless, it is crucial for WTO Members to actively consider their domestic water policies when participating in the multilateral negotiations. The following sections provide some considerations about the links between the GATS and water and then offer some initial insight into what may be the main threats that the GATS poses for domestic water management practices. Without any attempt to be exhaustive, the conclusions of this study offer recommendations for how water policy makers can take an active and constructive role in the GATS negotiations.

⁶⁸ See UNCTAD. *Trade in Services and Development Implications*. Note by the UNCTAD Secretariat Document TD/B/COM.1/55. UNCTAD, Geneva (2002). See also Mina Mashayekhi and Elisabeth Tuerk, *The WTO Services Negotiations: Some Strategic Considerations, Trade-Related Agenda, Development and Equity*, Occasional Papers 14, South Centre, (January 2003); Clare Joy and Peter Hardstaff, *Whose development agenda? An analysis of the European Union's GATS requests of developing countries*, WDM (April 2003); Peter Hardstaff, *The "Flexibility" Myth: Why GATS is a bad model for a new WTO investment agreement*, paper presented to seminar on WTO Investment Agreement, Geneva, 29 March 2003.

⁶⁹ In several cases, however, negotiating requests have been leaked. The most prominent amongst the increasing number of leaks is the one of the EC final requests which were put into the public domain by the Polaris Institute on 23 February 2003. See <http://www.polarisinstitute.org/gats/main.html>.

⁷⁰ Mina Mashayekhi and Elisabeth Tuerk, *The WTO Services Negotiations: Some Strategic Considerations, Trade-Related Agenda, Development and Equity*, Occasional Papers 14, South Centre, (January 2003); see also Peter Hardstaff, *The "Flexibility" Myth: Why GATS is a Bad Model for a New WTO Investment Agreement*, presented to seminar on WTO Investment Agreement, Geneva, 29 March 2003.

⁷¹ NGOs have been calling for a thorough and comprehensive assessment to precede further negotiations. For example, CIEL and WWF, *WWF and CIEL Call Upon WTO Members to Make Assessment Central to the GATS Negotiations*, Joint Statement, (July 2001). For other civil society organizations and international networks of civil society organizations have been calling for a thorough GATS assessment. See: <http://focusweb.org/our-world-is-not-for-sale/statements/Stop-gats-attack.html>, <http://www.wdm.org.uk/campaign/GATS.htm> or <http://www.forumue.de/forumaktuell/positionspapiere/0000001d.html>. For a comprehensive overview of current discussions on services trade assessment see, Martine Julsaint and Mina Mashayekhi, *Assessment of Trade in Services in the Context of the GATS 2000 Negotiations, Trade-Related Agenda, Development and Equity*, Occasional Papers 13, South Centre, (December 2002).

Section IV The GATS and Water: The Link

A Introduction

A number of links are apparent between the GATS and domestic laws and policies relevant to water management. The potential impact of the GATS on the supply of domestic water services has been a matter of great concern to civil society groups.⁷² The focus, however, has been primarily on access to water as a human rights issue.⁷³ This focus is natural, given the fundamental importance of water to human life and the recognition of water as a universal human right, such as occurred recently in the General Comment on the Right to Water.⁷⁴

This paper explores beyond these limits and considers how the GATS may have an impact on the management of water resources and the protection of the environment. In doing so it is necessary to first consider the types of services relevant to water, the notion of trade in services, and the types of entities and domestic regulatory measures that might be affected by the GATS.

B Services Covered by the GATS

The GATS applies to all “measures affecting trade in services.”⁷⁵ Thus, it is important to clearly define what a service is and what is considered *trade* in services. According to the GATS, “services” includes all services in all sectors.⁷⁶ Consequently, the scope of matters potentially falling within the jurisdiction of the GATS is very broad.

To date, most concerns relating to the GATS and water have focused on the provision of water services – that is, the supply of domestic water, sewage and related services. Such an approach may be adequate to satisfy human rights concerns, such as the right to water and the right to health.⁷⁷ However, it is equally important to develop a holistic, environmental approach. When focusing on water as a natural resource (as well as wetlands and ecosystems), the scope of services sectors that affect water resources and that may become subject to the various GATS disciplines is significantly broader than just water service providers. Services that are relevant when approaching the implications of the GATS from an environmental perspective include:⁷⁸

⁷² Gould, Ellen. *Water in the Current Round of WTO Negotiations on Services*, Canadian Centre for Policy Alternatives Briefing Paper Series: Investment and Trade, Vol. 4, No. 1, (2003); John Hilary, *GATS and Water: The Threat of Services Negotiations at the WTO*, A Save the Children Briefing Paper (2003).

⁷³ For GATS related research, see UNHCHR (2000), *Economic, Social and Cultural Rights: Liberalisation of trade in services and human rights*, Report of the High Commissioner E/CN.4/Sub.2/2002, (2000).

⁷⁴ In November 2002, the Committee on Economic, Social and Cultural Rights adopted its General Comment No 15 on the right to water thus providing a substantial framework for considering the right to water implications of trade and investment. UN Committee on Economic, Social and Cultural Rights, General Comment No. 15 (2002) *The Right to Water* (arts.11 and 12 of the International Covenant on Economic, Social and Cultural Rights), General Comment No. 15, E/C.12/2002/11, (November 2002).

⁷⁵ GATS Art. I.3.

⁷⁶ *Id.* at Art. I.3 (b) reads “‘services’ includes any service in any sector except services supplied in the exercise of governmental authority”.

⁷⁷ The 1977 United Nations Water Conference in Mar del Plata, Argentina, established the concept of basic water requirements to meet fundamental human needs, which was reiterated at the 1992 Earth Summit in Rio de Janeiro, Brazil in 1992. Source: *The Right to Water*, published by the World Health Organization, (2003).

⁷⁸ In recent years, there has been an increasing focus on so-called “win-win” potentials. “Win-win” scenarios suggest that trade liberalization – albeit with adequate complementary policies – can “...help

- **Water service providers and waste water treatment providers** – those responsible for supplying water services – which affect water resources in terms of how they extract water and how much they take, as well as how they dispose of water and wastes. To date, many industrial operations (such as those engaged in the production of goods) increasingly outsource this activity to specialized wastewater services providers. Thus, these are services with an increasing economic importance, also in terms of international trade.
- **Water infrastructure services** – those operating large dams, pipelines, networks or other structures – which may significantly affect surrounding upstream and downstream ecosystems, depending on the manner in which the infrastructure (for example, a dam) is operated;
- **Water-demanding services** –services that depend on the supply of water, including construction services, transport services, tourism services, services related to the generation of energy and industrial production – which affect water resources in terms of the quantity of water they demand, as well as the manner in which it is extracted;
- **Water-polluting services** –services that produce waste which typically pollutes water sources, including construction services, transport services, tourism services, services related to the generation of energy, those incidental to industrial production and waste management services – which impact water resources by releasing wastes into water resources.

To facilitate an understanding of the various types of service activities for the purpose of international trade negotiations, a classification document was prepared which lists the service sectors and sub-sectors covered by the GATS.⁷⁹ It is important to note that because Art. I of the GATS states that the agreement covers *any* service, services not explicitly listed in the so-called W120 document still are covered by the GATS.⁸⁰ Thus, the classification document only facilitates understanding and negotiation of specific commitments, but it does not determine the full scope of the GATS.⁸¹

Many believe that the classification list, established over a decade ago, is now outdated and does not reflect the reality of today's services economies. In response, WTO Members are

to deliver mutually supportive and positive outcomes for improved and cost-effective environmental protection". In that context, it has also been suggested that increased trade in environmental services, including water related services may bring about environmental benefits. See OECD, *Environmental Goods and Services, the benefits of further global trade liberalization*, trade and environment, (2001) <http://www.SourceOECD.org>. There is no evidence that a State binding itself to GATS commitments increases or decreases the likelihood of benefits from liberalization in trade, thus water policy makers should be wary of arguments that GATS commitments would serve to further their goals of beneficial liberalization.

⁷⁹ This document was prepared for the purpose of the negotiation of the GATS and the initial specific commitments during the Uruguay Round of Trade Negotiations. See Services Sector Classification List, Note by the Secretariat, Services Sector Classification List, 10 July 1991 MTN.GNS/W.120 reprinted as attachment 8 to Guidelines for the Scheduling of Specific Commitments under the GATS, S/L/92, (March 2001), S/L/92. This list draws on part 3 of the UN Provisional Central Product Classification devoted to services. Both lists classify services in hierarchical categories and sub-categories.

⁸⁰ GATS, Art. I.3.b.

⁸¹ Thus, while the GATS will cover many outstanding services activities "by default" the updated classification list will clearly delineate those services which are undoubtedly covered under the "general disciplines". In the political reality of trade negotiations, the fact that a specific service is explicitly listed in the classification list may also bring about increasing liberalization pressure in the context of the bi-lateral request/offer negotiations.

currently reviewing the WTO classification document. Three of the issues (on three types of services) arising in these discussions are particularly controversial and are of fundamental importance to water and national policies to protect and manage it:

- **Environmental Services/ Water Services:** In addition to the provision of water, the EU has suggested including the “collection of water” as an environmental service.⁸² More recently, the EU has submitted market access requests for this services sub-sector. Given that the reference in the originally public negotiating document was not explicitly limited to the collection of wastewater, there are concerns that this notion may be interpreted so as to extend the definition of water services to include the extraction of freshwater.
- **Energy Services:** the current lists of services sectors (from both the UN and the WTO) do not contain specific headings for energy services. Yet, even in the existing services schedules, several energy services activities are already included⁸³ and requests for more commitments are being submitted. Services incidental to mining or oil drilling and refining could have a substantial impact on water quality. In addition, possible future energy services may include commercial activities related to the production of electricity, such as the operation of dams or hydroelectric power plants.⁸⁴ These services are clearly relevant from a water management and conservation perspective.
- **Production Related Services:** Members have discussed whether “services incidental to manufacturing,” and those “related to pure manufacturing” (such as manufacturing on a fee or contract basis) should be classified as services under the GATS.⁸⁵ Including “pure manufacturing services” might expand the scope of the GATS to cover the production of goods, depending on the nature of any contractual relationships. Thus, domestic regulations on manufacturing relating to water, such as regulations regarding the discharge of pollutants, may affect commercial activities covered by the GATS.

GATS not only applies to a broad range of services related to water, but is also based upon an extremely broad notion of *trade* in services.

C Trade Covered by the GATS

Traditionally, “international trade” has referred to some form of cross-border transfer. This is the type of transaction covered by the first of the modes of trade referred to above – namely cross-boundary supply. However, the GATS extends beyond this type of trade. Most important for present purposes is “mode 3” supply – commercial presence. By covering “mode 3” supply, the GATS effectively prescribes disciplines respecting how a country may regulate foreign companies operating inside its borders. In this way, the GATS is in part an investment agreement.

This being the case, it should be re-emphasized that the multilateral trading system also has potential implications for trade in water as a good, as distinct from trade in water-related

⁸² EC, Environmental Services, S/CSS/W/38 (December 2000).

⁸³ For example, energy services appear in 3 areas of the current version of the W/120 list, i.e. as “services incidental to mining...”, “transportation via pipeline of crude or refined petroleum...”; and as “services incidental to energy distribution”.

⁸⁴ Note, however, that it is a common view that electricity is a good, and consequently its generation would be considered the production of a good rather than the provision of a service. This approach however has to be complemented with the view that the “operation of a power plant” is a service.

⁸⁵ Committee of Specific Commitments, Minutes of October 4, 2000 Meeting, para. 4, S/CSC/M/17 (2000). Note that services related to drilling have particularly come up in the context of energy services, see US Energy Services, S/CSS/W/24 (December 2000) and European Energy Services, S/CSS/W/60 (March 2001).

services. This type of trade potentially falls under the ambit of the GATT. This paper only considers trade in services, and thus does not address issues such as the international trade of bulk water.

It is important to note that in the WTO, GATT and GATS apply concurrently. Thus, a regulatory measure that aims to protect and preserve water or wetlands not only has to comply with the GATS rules on services trade, but also with the GATT rules on trade in goods. This “concurrent” application may cause problems, particularly in cases where governments try to carefully carve out certain obligations relating to one agreement, not considering the need to undertake complementary steps in the other. Thus, far-reaching rules on trade in services could effectively undermine the exclusion of water from rules for trade in goods. While such a scenario is more likely to arise in the context of NAFTA, where NAFTA parties have essentially excluded water in its natural state from the relevant rules on trade in goods, it is important to also flag that issue in the WTO debate on water.

D Regulatory Measures Covered by the GATS

According to Art. I of the GATS, the Agreement covers “measures affecting trade in services”.⁸⁶ “Measure” is defined as “any measure...whether in the form of a law, regulation, rule, procedure, decision, administrative action, or any other form...”.⁸⁷ This indicates that a broad range, indeed an open-ended list, of regulatory tools is covered by the GATS.

Art. I also specifies that the GATS covers “measures *affecting* trade in services”⁸⁸ (emphasis added). Thus, as long as the measure in question has an impact on trade, albeit incidental, it is covered by the GATS. Consequently, the GATS not only covers measures *regulating* trade in services, but also measures designed to regulate production, protect the environment, and ensure public health or consumer protection and which – simultaneously – *affect* trade in services.⁸⁹ Since the GATS bases its definition of “covered measures” on the *effect* of the measure, it affects more than merely regulations in the realm of traditional trade policy.

In addition, GATS coverage is not strictly limited to legally binding measures. Negotiating documents⁹⁰ and WTO Secretariat background notes⁹¹ suggest that the GATS would also cover self-regulatory or non-binding measures.⁹²

The question then is whether there are any water management and conservation policies (be they voluntary or legally binding) that could “affect” international trade in services. Indeed, many aspects of water management and preservation policies may affect economic activity, including activities by foreign service suppliers. Water resource plans, minimum flow requirements, pollution regulations or regulations relating to wetland conservation may limit the provision of water, tourism or transport services. South African “best management

⁸⁶ GATS, Art. I, 1.

⁸⁷ *Id.* at Art. XXVIII, (a).

⁸⁸ *Id.* at Art. I, 1.

⁸⁹ See Peter Fuchs, Elisabeth Tuerk, *The General Agreement on Trade in Services (GATS) and future GATS-Negotiations -- Implications for Environmental Policy Makers*, Paper prepared for the German Federal Environment Agency (2001).

⁹⁰ Japanese Draft, *supra* note 60, and EC Proposal on Necessity) *supra* note 54.

⁹¹ WTO. Note by the Secretariat. *The Relevance of the Disciplines of the Agreements on Technical Barriers to Trade (TBT) and on Import Licensing Procedures to Art. VI.4 of the General Agreement on Trade in Services*, S/WPPS/W/9, (1996).

⁹² This interpretation, however, is not supported by the text of the GATS, most importantly Art. XVIII. Specifically, Art. XXVIII (a) states that “measures” means any measure by a Member, whether in the form of a law, regulation, rule, procedure, decision, administrative action, or any other form.” The fact that all the “measures” mentioned in this definition are essentially binding regulatory actions suggests that any additional, albeit non-listed, measure should also be binding.

practice” standards could be seen as voluntary,⁹³ and conditions for authorizations to take water could be considered to affect the provision of water collection services – and therefore fall under the GATS.⁹⁴ The same could apply to European river basin management plans; the UK Environment Agency’s requirements for abstractors to enter into catchment-based water management arrangements; the UK appointment conditions or standards of performance for water services providers; or Australian threat abatement plans and wildlife conservation plans as set out in the EPBC. To the extent that these regulations create limits or constraints for commercial activities of foreign services providers, all of these regulatory activities could be considered “measures *affecting* trade in services”.

The GATS’ broad notion of trade (such as to include foreign direct investment) coupled with the extensive range of regulatory measures it covers, renders its potential application vast. The application is further expanded by the depth of regulatory entities whose measures are covered by the GATS.

E Entities Covered by the GATS

Art. I of the GATS sets out the types of entities whose regulatory measures are covered by the Agreement. Included are entities at different levels of government (national, regional and local) as well as non-government bodies exercising governmental authority. As such, the GATS is relevant to governments and entities not involved in, and often unaware of, international trade negotiations.⁹⁵ The fact that the GATS covers such a broad range of entities is crucial in light of both the way water services are provided and the way policies to preserve water are developed and implemented.

In regards to the *provision* of water, the GATS – with its broad coverage – would apply to some statutory water authorities and government-owned water service providers who have been delegated governmental authority. In India, for example, the Delhi Jahl Board is responsible for the supply of water in its geographical region, and throughout India much is done at the state level rather than at the national level. However, with its broad coverage, the GATS would also apply to the various community-based, self-regulatory or municipal systems of water provision. Examples of alternative systems of water provision in developing countries are Colombia’s SAGUAPAC (Cooperativa de Servicios Publicos Santa Cruz Ltda.) or the Brazil’s DMAE (Municipal Department of Water and Sanitation Services) in Porto Alegre.⁹⁶ The rise of such new approaches to water management structures, combined with a shift away from more centralized provisional systems, is a trend that could be threatened or constrained by the GATS.

In addition, policies to *preserve* water are being implemented with increasing frequency at the local and regional levels rather than at the national level. Since the GATS also applies to sub-national entities, its disciplines would apply, for example, to the way the community-based catchment management agencies in South Africa apply their role; to the river basin

⁹³ As regards to the production of goods, non-binding, voluntary standards are covered by the so-called “Code of Good Conduct”, one of the Annexes to the TBT Agreement. It remains to be seen whether GATS negotiations will adopt a similar approach.

⁹⁴ Note that some of the leaked EC market access negotiating documents specify in the water sector, that they do not imply access to water resources.

⁹⁵ Note that usually, international trade negotiations are carried out by federal rather than sub-federal governments. Sub-federal governments, as well as other affected entities may however be considered in various consultation processes that lead to a country’s negotiating position. In Europe, it is mostly DG Trade of the European Commission, who negotiates on behalf of European Member States. The latter coordinate their position in the so-called 133 Committee meetings, taking place in Brussels.

⁹⁶ For information about the effects of European GATS requests on these well working alternative approaches, see Clare Joy, Peter Hardstaff, *Whose Development agenda? An Analysis of the European Union’s GATS Requests of Developing Countries*, WDM, (April 2003).

management organizations in India; to the various councils, as well as state and federal agencies that compose the Brazilian National Water Resource Management System; and to the UK Environment Agency, which is responsible for regulating catchment abstraction management strategies.

In Europe, this broad coverage of the GATS raises additional complex legal questions: the EU Water Framework Directive requires that resources are managed at the river basin level, even where rivers basins span national borders. Thus, the responsible entities (so-called International River Commissions) might be composed essentially of representatives from various European Member States. Indeed, a series of inter-governmental entities already exists that take certain decisions regarding, for example, the management of river systems. Specifically, in Europe, the Convention on the Protection of the Rhine was established to protect the entire Rhine watershed.⁹⁷ It is important to determine whether these entities fall within the scope of the GATS, considering that they may be making decisions which affect the provision of services (such as by setting quality-level standards for rivers or by limiting certain inland water way transport activities). Generally, the actions of inter-governmental organizations are not covered by WTO Agreements.⁹⁸ However, the situation could be even more complex in Europe since the EC itself is a Member of the WTO, along with its individual European Member States.

Thus, any of the measures taken by these entities – as long as they “affect” trade in services, could potentially be subject to the GATS. The GATS, however, does not prescribe outright prohibitions of these entities’ regulatory actions. Rather, GATS obligations establish certain boundaries which prohibit certain forms of regulatory actions and thereby limit how these entities perform their functions. This becomes problematic since many of these entities may not even be aware of the existence of the GATS, much less its applicability to their role. Thus, raising awareness amongst these potentially covered entities is an essential first step in avoiding unexpected negative environmental, social or developmental consequences stemming from the current GATS negotiations.

⁹⁷ Convention on the Protection of the Rhine, April 12, 1999, F.R.G., Fr., Lux., Neth., Switz., Eur. Available at: http://www.thewaterpage.com/rhine_convention.htm

⁹⁸ Rather, the WTO Agreements cover the national regulatory actions Member States take to implement decisions taken at the international level. This for example, is also the case in the context of multilateral environmental agreements. See Matthew Stillwell, Richard Tarasofsky, *Towards Coherent Environmental and Economic Governance: Legal and Practical Approaches to MEA-WTO Linkages*, WWF/CIEL, (October 2001); Matthew Stillwell, Elisabeth Tuerk, *Trade Measures and Multilateral Environmental Agreements: Resolving Uncertainty and Removing the WTO Chill Factor*, WWF International Discussion Paper, (October 1999).

Section V Implications of the GATS for Water Management Policies

A Introduction – Framework for Analysis

This Section considers some common features of water laws as identified above, and assesses how they conform to, or conflict with, the regulatory disciplines of the GATS. For several reasons, this analysis cannot be exhaustive. First, given the political nature of WTO negotiating processes, the GATS is shrouded with ambiguities and many existing GATS provisions leave scope for interpretation. Second, any final determination of the inconsistencies between the GATS and domestic water laws depend to a large extent on the exact nature and implementation of the domestic policy in place. Such analysis would most likely be undertaken once a WTO dispute settlement panel has to address the implications in the light of a specific case. Third, many GATS provisions are currently being negotiating and thus are not yet finalized. While this study frequently points to draft language and negotiating documents, many issues that may in the end be decisive are yet to be determined by negotiators.

This Section first sets the scene for the analysis by discussing the relationship between the GATS and questions surrounding the ownership of water. Subsequently, it addresses issues relating to:

- policies to avoid over-exploitation by using licenses, concessions and permits that establish clear quantitative limitations for service providers extracting or using water;
- policies to avoid over-exploitation by using licenses, concessions and permits that establish other quantitative caps on service providers extracting or using water;
- policies to mitigate water pollution and to preserve water quality by using licenses, concessions, permits and technical standards to regulate discharge of pollutants or to operate facilities;
- policies to ensure high quality provision of water-sensitive services by using qualification requirements for service providers;
- policies that ensure the recognition of the true economic value of water by using licensing fees and financial aspects in concession contracts;
- policies that require sustainability assessments and other documentation to anticipate and avoid environmental damage of economic activities; and
- policies to preserve water by regulating the use and ownership of land.

Section V also addresses cross-cutting effects originating in current negotiations on domestic regulation and in the GATS national treatment obligation on water regulation. Finally, it concludes by assessing the effectiveness of using the GATS environmental exception to justify measures that aim to protect and preserve water but are otherwise GATS inconsistent.

B Water Rights: Ownership of Water and the Allocation of Water Rights to Private Entities

Ownership of water has become a key issue in water resource management. Water rights are important for various water uses such as drilling for water, bottling water, or other water uses set out in concession contracts.⁹⁹ At the same time, water rights are a central factor in policies to protect and manage water effectively. As highlighted in Section II, much of the water reform undertaken globally has involved a shift to provide more secure ownership rights.

The allocation of water rights is complicated by the fact that water is considered a basic human right, and therefore even the poorest people in a society have a *de facto* right to water. In addition, the last decade has seen an increase in the number of indigenous groups (not necessarily poor) making claims for water access and control rights, especially in Andean countries such as Ecuador and Bolivia, and in the United States. These claims are often made in conjunction with claims for equal land distribution.¹⁰⁰

Likewise, many concerns over the GATS have revolved around water ownership, with its opponents arguing that it may result in a loss of national sovereignty over water.¹⁰¹ WTO Members have responded to these concerns by stating in their market access negotiating documents that they exclude "...any cross border transportation either by pipeline or by other means of transport..." and do not "...imply access to water resources."¹⁰² Similar statements have been made in the energy sector where proposals emphasize that "...many natural resources are held in trust for the public" and that the negotiating document in question is "not proposing to address issues of ownership of natural resources." While these statements suggest¹⁰³ that the GATS and its negotiating processes do not affect ownership of water, it is a complicated issue and concerns should not so easily be dismissed.

Water ownership goes beyond the actual ownership of the *corpus* of the water itself. The broader notion of water ownership, as expressed in property rights, usually includes the right

⁹⁹ For the purposes of this paper, a Concession Contract is defined as: "A contract in which a country transfers some rights to a foreign enterprise which then engages in an activity (such as mining) contingent on state approval and subject to the terms of the contract." BLACK'S LAW DICTIONARY (7th ed.1999). Specifically, as regards to water services "[t]he term "concession agreement" is used for any number of different forms of mandate given to the project company to build and/or operate an otherwise public sector project...[and can]...be used to describe one of the fundamental documents used for BOT projects. See Jeffrey Delmon, *Water Projects, A Commercial and Contractual Guide*, Kluwer law International (2001).

¹⁰⁰ See generally, Boelens, Rutger, *Water Law and Indigenous Rights – WALIR, Towards recognition of indigenous water rights and management rules in national legislation*, (2002), discussing how emphasis on water rights allocation has shifted from the poor to indigenous people as separate entities.

¹⁰¹ See generally, Friends of the Earth, Briefing, *Stealing our Water Implications of GATS for Global Water Resources*, at http://www.foe.co.uk/resource/briefings/gats_stealing_water.pdf; See also Ellen Gould, *Water in the Current Round of WTO Negotiations on Services*, Canadian Centre for Policy Alternatives Briefing Paper Series: Investment and Trade Vol 4, No 1 (2003); Shrybman, Steven, *The Impact of International Services and Investment Agreements on Public Policy and Law Concerning Water*, (2002); Caplan, Ruth, *Don't Let the WTO Get Hold of Our Water!*, Alliance for Democracy (2003); (for various analyses about international trade / investment rules and water).

¹⁰² EC request to Taiwan. Available at: <http://www.gatswatch.org/docs/offreq/EUrequests/Taiwan.pdf>.

¹⁰³ Regardless of other issues, it is arguable whether such statements will be of any legal effect if they are not subsequently incorporated into the final outcomes. It is also possible that Northern countries will pressure the South to not include such language in their commitments.

to use water.¹⁰⁴ Property rights in water are frequently specified in terms of a volume, a location, a maximum rate of extraction and (ecological) flow conditions under which water may be taken. Private parties will focus on this right, as well as on the extent to which that right is guaranteed (that is, whether a state's rescinding of a water right constitutes a taking or expropriation).

With policy trends towards granting private entities the right to use water rather than real ownership of it, ownership of the actual *corpus* of the water in many jurisdictions remains vested in the State.¹⁰⁵ Yet, this does not, in and of itself, protect a State's right to use and continuously regulate water resources. If access rights to water are granted in such a way as to embed the right to take for long periods, with compensation payable for any policy changes, the regulatory entities may find themselves constrained, at least financially, in putting in place regulatory changes.¹⁰⁶

Effective regulatory capacity, however, becomes more important with increased involvement of the private sector in activities such as the provision of water, waste-water services, water extraction, or other water-using or consuming services. Similarly, effective regulatory capacity, in addition to the ability to re-allocate water rights, is crucial given that many water systems are already over-allocated and there is significant demand for more water to be made available for agricultural or development needs. Effective regulatory capacity includes the ability to adapt to changes in policy objectives, as well as to changes in climate, scientific evidence or resource management policy. Thus, there are many variables involved in water resource management, and striking the right balance has proven difficult.

While it is not clear how the GATS specifically addresses the question of granting water rights – that is, water *access* – to private parties, it is clear that it has significant implications for environmental regulators in this context.

One possible constraint originates from the GATS “lock-in” effect. For example, in so far as granting a water right is directly associated with market access-related issues under the GATS, the fact that GATS commitments are hard to reverse is crucial. Essentially, the “lock-in” effect would make it very difficult for a WTO Member to adapt its policies, if these changes have the result of reducing market access once it has been granted. The “lock-in” effect shifts the onus to regulators to ensure that water allocation is properly done the first time, and that water resources do not become over-allocated (if they are not already), thereby, significantly reducing regulatory flexibility.

Overall, the impact of the GATS on domestic abilities to set policies for the allocation and administration of water rights is largely unexplored. Given the importance of allocating water rights as a tool for environmental (and social) regulation, increasing attention should be paid to these questions. The following sections provide some initial starting points for such analysis.

¹⁰⁴ See generally, Miguel Solanes, *Water: Rights, Flexibility, and Governance: A Balance that Matters?*, Economic Commission for Latin America and the Caribbean of the United Nations (2002) (discussing water ownership rights in developing nations).

¹⁰⁵ This occurs, in some manner or other, in all of the jurisdictions considered in Part II.

¹⁰⁶ Note however that the GATS does not provide for financial compensation.

C Avoiding Over-Exploitation: Licenses, Concessions and Permits that Establish Clear Quantitative Limitations on Services Provision

Regulating access to water and its use is an essential element of water management policies. This can involve permission to extract water as well as to use or otherwise access it in the production or delivery of a service. Permission to extract water (either from an aquifer or any other watercourse) is maybe the most crucial aspect of water resource management. At the same time, it is – at least from a GATS perspective – the least explored aspect.

Often, permission to extract natural resources is granted in concession contracts. Consequently, it is an important question whether the GATS limits domestic policies setting out parameters for the negotiation of such contracts, or the contracts themselves. While it is unclear how the GATS relates to such contracts, it is clear that concession contracts or domestic rules setting out parameters for their negotiation and implementation may affect trade in services.¹⁰⁷ Specifically, this could be the case for services related to exploration and drilling, construction, or water collection services.

Contrary to the ambiguity in concession contracts, GATS coverage of more “traditional licensing policies” is a bit more determined. The GATS, in several places refers to licensing requirements, as do WTO Members in their country schedules.

Concession Contracts

Concession contracts are agreements between countries and investors, including foreign investors. They either grant permission to extract natural resources (such as access to water, forests, minerals, fisheries etc.) or they transfer other rights (such as the right to enter and serve a market). Concession contracts set forth the respective rights and responsibilities of the country and the private parties concerning the project in question. These investors could also be service providers (such as those providing exploration, drilling, construction or operation of power plants).

Despite the fact that the issue of access to natural resources raises important environmental and public interest concerns, to date concession contracts are mostly negotiated behind closed doors, without public consultations and typically without any environmental or social impact assessment. Thus, putting in place an adequate domestic framework for their negotiation and implementation appears to be crucial from an environmental perspective.

Consequently, whether and how the GATS relates to concession contracts and to domestic frameworks are crucial questions. To date, however, these questions are largely unexplored. Several scenarios appear possible and could even overlap: concession contracts that clearly establish quantitative limitations may be covered by the GATS market access provision; discriminatory features of concession contracts may be covered by the GATS national treatment provision; non-discriminatory features of concession contracts may still have to comply with GATS rules on domestic regulations; concession contracts *per se*, may be considered licensing arrangements under Art. VI.4; they may also be considered the tool through which licenses are granted (in the latter case they could still be considered “measures relating to ...licensing requirements...” as referred to in Art. VI.4); another possibility is that concession contracts may be considered fully outside the scope of the GATS.

Unfortunately, any discussions WTO Members have had on these crucial issues related to concession contracts and the GATS have not involved the general public, water or environmental experts.

¹⁰⁷ A complicating factoring in any speculation about concession contracts is the degree of variation found in WTO Member countries legal regimes regulating concession contracts.

Licenses may also constitute important tools for environmental policy making. Licenses can be used to limit the number of transport or tourism operators conducting business on a river. Licenses could also limit the number of entities operating dams or pipelines. The latter could occur if countries decide to have public monopolies run dams or other operations that are considered public utilities. Similarly, licenses may be used to limit industrial activities, affecting those services that industrial manufacturers frequently outsource, such as waste management and treatment. In all these cases, licenses could also incorporate or relate to water (access) rights.

As shown above, concession contracts and licenses, or any other way to allocate water rights to private entities in order to avoid over-exploitation, may be implemented through, or result in, quantitative limitations for service providers. These may be limitations on, *inter alia*, the number of service suppliers or service operations, the total value of service transactions, or the total quantity of service output. Similarly, in cases where a foreign company is involved, licenses and related policies may require specific types of legal entities (such as joint ventures) or establish limitations on the participation of foreign capital. Thus, any policies setting out these types of limitations would possibly be in conflict with the GATS market access provision.

The GATS market access provision prohibits certain types of policies that result in quantitative limitations. Specifically, Art. XVI establishes that:

“In sectors where market-access commitments are undertaken, the measures which a Member shall not maintain or adopt either on the basis of a regional subdivision or on the basis of its entire territory, unless otherwise specified in its Schedule, are defined as:

- (a) limitations on the number of service suppliers...
- (b) limitations on the total value of service transactions or assets....
- (c) limitations on the total number of service operations or on the total quantity of service output...
- (d) limitations on the total number of natural persons that may be employed in a particular service sector or that a service supplier may employ....
- (e) measures which restrict or require specific types of legal entity or joint venture through which a service supplier may supply a service; and
- (f) limitations on the participation of foreign capital in terms of maximum percentage limit or foreign shareholding or on the total value of individual or aggregate foreign investment.”

Thus, assuming that a WTO Member had made commitments in sectors that cover economic activities such as deviating or extracting water, environmental laws that put overall caps on the amount of water to be extracted or to be deviated could be considered limits on the total quantity of services output. For example, the Brazilian National Water Resource Policy mandates that quantitative controls be set in place for deviation of water, or for the extraction of water from aquifers. Similarly, in the UK, all abstractors taking more than 20 cubic meters per day require a license. While in this latter case, the license specifies the final amount of water per license, it would be based upon an overall cap on extractable water for a specific area.¹⁰⁸

Any GATS consistency or inconsistency with concession contracts, licensing or other policies would, among other things, depend on the interpretation of GATS Art. XVI, the nature and extent of the country’s relevant market access commitments and the nature of the contract or

¹⁰⁸ See Sec. de Recursos Hidricos, Gov. do Brasil, National Water Resources Policy of Brazil (2002); Water Bill, introduced in the House of Lords, 19 February 2003.

respective policies.¹⁰⁹ While the clarity of a specific commitment would depend upon each county's drafting process, the exact content of many of the most basic GATS questions still remain shrouded by uncertainty.

There has been little discussion as to which policies fall squarely within the GATS market access provision. However there has been even less discussion about the extent to which environmental policies that result more broadly in quantitative restrictions would be covered by the GATS market access provision. The following section will provide some initial thoughts on these issues.

D Avoiding Over-Exploitation: Licenses, Concessions and Permits that Establish other Quantitative Caps on Services Provision

The preceding section addressed domestic policies (relating to concession contracts, licensing arrangements or other permits or policies) that clearly establish one of the quantitative limitations prohibited by GATS Art. XVI (a) to (e) (for example, the *number of service suppliers* or *service operations*, the total *value of service transactions*, or the total *quantity of service output*).

In addition to those, there are a series of related policies, whose treatment under the GATS is even less clear. For example, licenses can be used to establish a system of regulating the amount of water taken out of an area, by determining either a daily or per-user cap. Similarly, other systems can apply to the discharge of water or pollutants into water. Such systems are distinct from those clearly limiting the *number of service providers* in a given area, the *value of service transactions*, the *number of service operations* or the *quantity of service output*.

From an environmental perspective however, the *number of service suppliers* operating in a specific area may not be as important as the actual *impact that the operations of service suppliers* have on the quality or the amount of water available, or on wildlife affected by these operations. Therefore, to avoid any possible negative environmental implications, regulators may wish to set a maximum limit on *water use* by economic operators in a given area, rather than on the number of economic operators themselves.

South African water licenses, for example, set limitations on the amount of water that can be used by one licensee for a particular purpose (South Africa requires licenses on all types of water use except for domestic purposes or watering livestock). Another example is the Brazilian Water Resources Policy which effectively sets quantitative limits on water that is deviated or extracted in order to be used in production processes. The proposed water regulations for the UK and Wales specifically state that, by 2025, there should be a system that allows the trading of licenses for water use for agriculture abstraction licenses. Such a system would be designed to encourage growth by economically efficient users while keeping the total amount of allocated water to a minimum.¹¹⁰

In light of the GATS, an important consideration arises as to whether these types of quantitative limitations on the *use* of water amount to quantitative limitations as prohibited by GATS market access obligation. It could be argued that a quantitative cap on water use would

¹⁰⁹ Of course any analysis would also have to determine whether the domestic measures in question is in compliance with other GATS provisions, including those on national treatment or domestic regulation.

¹¹⁰ Available at

http://www.environmentagency.gov.uk/commondata/105385/national_report_english.pdf?lang=e.

result in a limit on the *total quantity of services output* (Art. XVI c), on the *total number of service operations* (Art. XVI c) or the *total value of service transactions* (Art. XVI b).

In those cases where water is an essential *input* into the delivery of a service, a limitation on water availability can also be a *de facto* cap on the *quantity of services output*, on the *total number of service operations* or even the *total value of the service transactions* in the respective area. This is the case with power-plants, whose output is limited by how much water can be taken from a river.¹¹¹ Similar issues could arise with tourism services, such as trout fishing or artificial snow making. Water management policies may place limits on such recreational uses of water, rule out such activities during certain ecologically sensitive times such as breeding periods or simply limit activity during a day or a season.

Another consideration is services where water is needed as a sink, rather than a source. Licenses which limit the amount of pollutants a service provider can discharge into water (as discussed above), may also result in a quantitative limit on services if the discharge limit is per area. The EU water framework relies on just this sort of regime. Would such a cap be considered a quantitative limitation on the total number of service operations or quantity of service output?

If any of these systems were seen as placing a quantitative cap on services providers, the ability of environmental regulators to create protective regulations would be greatly compromised, especially with respect to their capacity to preserve water by regulating its availability for economic activity and its input into service delivery. In that context, two aspects are relevant from a GATS perspective. The first addresses measures that aim to protect natural resources by limiting their *input* into the production process of services. The second more generally addresses the *form* as opposed to the *effect* of the measure in question.

As regards the first aspect, the GATS in part appears to provide a safeguard for domestic regulatory measures that aim to protect natural resources by limiting their input into the production process of services. Footnote 9 to Art. XVI states that “[s]ubparagraph 2(c) does not cover measures of a Member which limit inputs for the supply of services.” Thus 2(c), the subparagraph of the GATS market access provision that prohibits limitations on the *total number* of service operations, should not prevent a government or other regulatory body from placing limits on the amount of water which certain or all service providers may use.

While this appears to provide a degree of comfort concerning Art. XVI 2(c) essentially the same question occurs as regards Art. XVI, 2(b), the subparagraph of the GATS market access provision that prohibits limitations on the *total value* of service transactions. However, there is no equivalent safeguard for subparagraph 2(b). This is despite the fact that policies aiming to protect and preserve water by regulating its input into economic production processes can have both effects, limiting the *total number of service operations* and *total quantity of service output* (subparagraph 2(c), as well as the *total value of services transactions* (subparagraph 2 (b)).

From an environmental and water management perspective, there is no reason for treating these two policies differently. It therefore seems that similar footnote language would also be necessary for some of the other sub-paragraphs of the GATS market access provision. While it may be argued that vigilant interpretation may be enough to alleviate legal insecurities in case of a dispute, the current lack of clarity is less than optimal.

This raises the second aspect relating to the *form* and *effect* of the measure in question. Careful interpretation could move us somewhat ahead in that context. For example, it could

¹¹¹ Note that most likely the operation of a power plant is considered a “service”, while electricity is considered a “good”.

be argued that the GATS market access provision clearly establishes that the policies prohibited are those that not only have certain *effects* (such as creating these quantities limits) but that also take certain *forms*. Such prohibited *forms*, listed in the GATS market access provision are numerical quotas, monopolies, exclusive service suppliers, or economic needs tests. Consequently, it could be argued that any domestic policy that amounts to quantitative limitations but does not have any of the forms which are mentioned in the closed list in Art. XVI (a) to (f) would be allowed under the GATS market access obligation.¹¹²

Specifically, Art. XVI establishes that:

“In sectors where market-access commitments are undertaken, the measures which a Member shall not maintain or adopt either on the basis of a regional subdivision or on the basis of its entire territory, unless otherwise specified in its Schedule, are defined as (emphasis added):

- (a) limitations on the number of service suppliers whether *in the form of numerical quotas, monopolies, exclusive services suppliers or the requirement of an economic needs test*;
- (b) limitations on the total value of service transactions or assets *in the form of numerical quotas or the requirement of an economic needs test*;
- (c) limitations on the total number of service operations or on the total quantity of service output *expressed in terms of designated numerical units in the form of quotas or the requirement of an economic needs test*;
- (d) limitations on the total number of natural persons that may be employed in a particular service sector or that a service supplier may employ ... *in the form of numerical quotas or the requirement of an economic need test*;
- (e) measures which restrict or require specific types of legal entity or joint venture through which a service supplier may supply a service; and
- (f) limitations on the participation of foreign capital in terms of maximum percentage limit or foreign shareholding or on the total value of individual or aggregate foreign investment.”

Thus, most of the sub-paragraphs (a) to (f) explicitly state a specific form of measure prohibited. However, it is far from clear whether the above interpretation, stressing the cumulative requirements of *effect* and *form* is the commonly accepted one. If the common interpretation set strict requirements only on the *effect* and not on the *form* of governmental regulation, the scope of the GATS market access provision would indeed go much farther in compromising valuable water management tools.

To date, questions concerning quantitative caps (on water use but also more generally) remain largely unexplored. It is also not clear to what extent WTO Members have addressed these issues in their deliberations in the various WTO services- and environment-related committees.¹¹³ Water management policy makers may wish to raise these questions. In addition, water management policy makers may wish to ensure that any of their domestic

¹¹² That would then raise the question whether such policies would still have to comply with existing and future rules under Art. VI.4 which is probably even more problematic.

¹¹³ Another major, yet unexplored question in this context, is the meaning of the phrase “on the basis of a regional subdivision or on the basis of its entire territory” in Art. XVI of the GATS. It is unclear for example, whether a “catchment” or a river – basin would be considered a “regional sub-division” or whether regional sub-divisions are only those corresponding to administrative geographical areas within a country. In para 4 the GATS Scheduling Guidelines state that “[w]here commitments do not cover the entire national territory, the entry should describe the geographical scope of measures taken according to Article I:3(a)(i).” *Guidelines for the Scheduling of Specific Commitments under the General Agreement on Trade in Services (GATS)*, S/L/92, (2001).

policies possibly falling under Art. XVI of the GATS are duly reflected in their country's schedule of specific commitments.

While the best way to do this is by refraining from entering into commitments at all, another option is to attach the respective conditions or limitations to the commitment.¹¹⁴ Another possible option at the multilateral level (at least to clarify and establish a common understanding) is to raise these issues in the GATS technical review.

E Pollution Control: Licenses, Concessions, Permits and Technical Standards to Regulate Discharge of Pollutants or to Operate Facilities

Licensing and permitting are the primary methods for monitoring, regulating and limiting environmentally harmful activities involving water. For example, water management policies work through licenses for extraction of water or through water-related licenses for operating water infrastructure (such as dams and locks), waste or water discharge into water, or operating boats on lakes and rivers.

The previous sections have dealt with such licensing policies in so far as they could constitute quantitative limitations on service provision. However, there are additional aspects of these licensing regimes that go beyond the establishment of quantitative caps including:

- charging fees for licenses that reflect the negative externalities related to water use; and,
- setting out technical standards through licenses for the manner in which economic activity has to be conducted (for example, conditions to regulate the discharge of pollutants into waters or zoning regulations aimed at protecting ground water or wetlands).

Besides requirements to obtain a license, Art. VI.4 of the GATS or future disciplines on domestic regulation may affect conditions within the license itself (for example, the above-mentioned technical standards to regulate the discharge of pollutants into waters or zoning regulations aimed at protecting ground water or wetlands). Most likely, from a GATS perspective, such technical standards would be considered to form part of the license. Specifically, a 1996 WTO Secretariat background note produced for Art. VI.4 discussions stated "...licensing requirements are requirements, other than qualification requirements, with which a service supplier is required to comply in order to obtain formal permission to supply a service. e.g. residency requirements, fees, establishment or registration requirements."¹¹⁵ Thus, technical standards could be considered part of licensing policies, effectively subjecting them to Art. VI of the GATS and possible future disciplines arising from it.¹¹⁶

In addition to operating in conjunction with licenses, technical regulations and standards operating on their own also provide an important tool to mitigate the negative environmental effects of certain services. Again, most likely this would be an issue to be discussed under

¹¹⁴ Egypt for example (while it is not using "licenses") has included a limitation in its schedule specifying that "[t]he addition to the inland water passenger and / or local tours is subject to the physical capacity of the Nile river." See, Egypt, Schedule of Specific Commitments, GATS/SC/30, 15 April 1994.

¹¹⁵ GATT Secretariat, The Relevance of the Disciplines of the Agreements on Technical Barriers to Trade (TBT) and on Import Licensing Procedures to Art. VI.4 of the General Agreement on Trade in Services, S/WPPS/W/9 (11 September 1996).

¹¹⁶ Indeed, the EC Proposal on Licensing adopts the 1996 WTO Secretariat's background note definition of licensing, *supra* note 60, footnote 3.

GATS Art. VI.4. According to the WTO Secretariat's background note, technical standards are requirements which may apply both to the characteristics or the definition of the service itself and to the manner in which it is performed.¹¹⁷ For example, a standard may stipulate the types of pollutants a power facility may discharge into a river, as well as how often, or in what volumes it may be discharged. There are several technical standards that are crucial from a sustainable water management perspective.

The South African water policy, for instance, uses standards for dischargers as well as technical conditions for locations of water extraction sites. Similarly, the European Water Framework Directive attempts to control pollution not only by setting water quality standards, but also by setting limits and technical standards for discharging pollution. Specifically, Europe is currently in the process of creating a list of "Priority Substances" in its WFD. To date, the list identifies 32 substances or groups of substances, which are shown to be of major concern for European waters because of their harmful properties. Once the list of priority substances is adopted, the EC will propose community-wide water quality standards and emission controls for the priority substances.¹¹⁸ In addition to adding pollutants, water quality standards may also apply to water temperature, since many power plants increase the temperature of their discharge water to the point where it can be harmful to the environment.

Technical standards for the design and construction of water works is another area where water policy makers can create environmentally friendly regulations. For example, the South African Water Act allows the Minister to issue regulations for the design, construction and operation of any water works. The service providers affected by such regulations would not only be those operating the water works but those construction services building them as well.

In principle, all of these policies – voluntary or binding – could affect service providers who:

- extract water;
- provide water services;
- use water as an input in the generation of the services they provide;
- in the course of their economic activity, discharge into water courses.

Most likely, the water management policies described above would be considered technical regulations, standards or licensing arrangements under future GATS Art. VI.4 disciplines.¹¹⁹ The question now is whether any future disciplines covering these measures would effectively constrain domestic policy makers from using these policies.

Current concerns essentially focus on the so-called "necessity test". Negotiating drafts have suggested the inclusion of legally enforceable "necessity" or "proportionality" tests into future GATS Art. VI.4 disciplines. These proposals have met with concerns that such tests may make it hard for regulators to implement technical regulations they consider most suitable for the achievement of their regulatory goals.¹²⁰ Concerns focus on two issues:

- the *stringency* of the "necessity" test; and,
- a government's ability to determine *what* it considers a *legitimate* regulatory goal.¹²¹

¹¹⁷ WTO Secretariat, The Relevance of the Disciplines of the Agreements on Technical Barriers to Trade (TBT) and on Import Licensing Procedures to Art. VI.4 of the General Agreement on Trade in Services, para. 4, S/WPPS/W/9 (Sept. 11, 1996).

¹¹⁸ http://europa.eu.int/comm/environment/water/water-dangersub/pri_substances.htm.

¹¹⁹ Note that those regulations that clearly set up quantitative limitations would be covered by Art. XVI, the others most likely by Art. VI.4.

¹²⁰ See *supra* note 52.

¹²¹ Jan Neumann and Elisabeth Tuerk, *Necessity Revisited - Proportionality in WTO Law after Korea-Beef; EC-Asbestos and EC-Sardines*. Journal of World Trade, Vol. 37, No. 1 February 2003.

Concerns about the *stringency* of the “necessity” test originate from the fact that to date “necessity” tests have proven hard to satisfy.¹²² While most recent jurisprudence can be interpreted to include certain relaxing elements, according to earlier jurisprudence, a domestic measure would pass the “necessity” standard only if there was no alternative measure which the country “could reasonably be expected to employ” and “which is not inconsistent with other GATT provisions” or “which entails the least degree of inconsistency with other GATT provisions.”¹²³

Concerns about a government’s ability to determine its *legitimate* regulatory goals are grounded in the fact that the WTO’s dispute settlement panels and its Appellate Body (AB) have made statements to the effect that an open-ended list of legitimate objectives allows the tribunals to call into question the legitimacy of the policy goal under examination.¹²⁴ This concern is even more valid in light of the fact that some of the “necessity” tests contained in various WTO Agreements stop short of explicitly listing policy objectives such as the protection of the environment or the conservation of water.

As a response to these concerns, new language may require WTO Members to apply technical standards “only to fulfil” certain “national policy objectives”.¹²⁵ While the “national policy objective” language suggests WTO Members have some leeway to create technical regulations, the list of policy objectives stops short of containing any reference to the protection of the environment or natural resources.¹²⁶ As regards the “only to fulfil” test, there is fear that it may be even stricter than the traditional “necessity” test.

Water management policy makers may wish to carefully follow current negotiations and suggest that none of the “necessity”, “proportionality” or “only to fulfil” tests form part of future GATS Art. VI.4 disciplines. In addition, they should work to have the protection of water and natural resources considered a legitimate national policy objective. Alternatively, they may suggest that these sorts of technical regulations are not covered by any future disciplines. Given that, to date, there is no agreement among WTO Members about what sort of domestic regulations should be covered by any future disciplines,¹²⁷ it may well be possible to define the scope to exclude certain regulations.

F High Quality Provision of Water-Sensitive Services: Qualification Requirements for Services Providers

Environmental threats might also be mitigated by using qualification requirements as a regulatory tool. Qualification requirements are crucial for services that require a specific educational background such as water-bore drilling services or water works services. In South

¹²² For example, to date, only the French import ban on asbestos – a carcinogen – has been justified by the necessity test, as set up in Article XX (b).

¹²³ *US – Section 337 of the Tariff Act of 1930*.

¹²⁴ “[W]e share the view of the Panel that the second part of Article 2.4 implies that there must be an examination and a determination on the legitimacy of the objectives of the measures”, *EC – Trade Description of Sardines* (hereinafter “*EC – Sardines*”), AB Report WT/DS231/AB/R, para 286. While this statement refers to the notion of “legitimate objectives” as contained in Art. 2.4 TBT, it is motivated by the link between Art. 2.4 TBT and Art. 2.2 TBT, the latter containing a necessity test with an open ended list of legitimate objectives.

¹²⁵ Japanese Draft, *supra* note 60.

¹²⁶ Rather, the indicative list currently contained in the paragraph setting out the objectives of the draft disciplines (para 1) only refer to the “quality of the services”. The more specific paragraph referring to technical standards (para 28), refers to “the protection of consumers and establishment of minimal standards to ensure the quality of the service”. See *supra* note 60, paras 1, at 28.

¹²⁷ Note that to date there is no agreement amongst WTO Members about what are considered “technical regulations” in the context of Art. VI.4, and even less what are “measures relating to such technical regulations.”

Africa, the NWA allows the Minister to set qualifications for persons designing, constructing and operating water works. Qualification requirements can also be linked to licenses, such as in Australia, where the 2000 Queensland Water Act and the 2002 Water Regulation require all water-bore drillers to be licensed, to meet certain minimum qualification requirements and to comply with certain standards when drilling and constructing bores.¹²⁸

How, and to what extent, would the GATS impact such policies? Most likely, qualification requirements, or licenses operating in conjunction with them,¹²⁹ would be covered by GATS Art. VI (on domestic regulation). As discussed above, currently neither the coverage nor the content of possible future Art. VI.4 disciplines have been determined.¹³⁰ Water management policy makers may wish to carefully monitor these negotiations, to ensure that any negotiating outcome will not impede their ability to set, implement and enforce their own qualification requirements.

G Water Pricing: Recognizing the True Economic Value of Water in-Licensing Fees and Financial Aspects of Concession Contracts

Financial considerations are relevant for regulating water use in at least two ways:

- contracts (including concession contracts) for the extraction of water frequently establish a price per actual unit of water extracted;
- licensing regimes frequently contain fees which do not depend on the amount of economic activity undertaken.

This means that a low price-per-unit could lead to the over-extraction of water with nothing built into the licensing regime to compensate.

It is important that the price paid for water reflect the true value of the water available. For example, water management policies could require that negative externalities arising from the discharge of pollutants into watercourses or from tourism facilities operating at natural water courses, be reflected in the licensing fee.¹³¹ In Europe, EU Member States will be required to ensure that the price charged to water consumers - such as the price for the abstraction and distribution of fresh water and the collection and treatment of waste water - reflects the true

¹²⁸ See for example the Queensland Water Act 2000, § 816 and the Water Regulation 2002, § 23, which require all water bore drillers to be licensed, to meet certain minimum qualification requirements, and to comply with certain standards when drilling and constructing bores.

¹²⁹ The EC Proposal on Licensing submits that disciplines should “aim to ensure” that qualification requirements “shall be [b]ased on objective criteria and transparent criteria, such as *competence and the ability to supply the service*” (emphasis added), *supra* note 60, section III, 1.3, at no. 10. This could be interpreted to suggest that factors beyond or outside of strict “competence” or “ability to supply the service” – such as qualifications that would support environmental conservation and wise use – would be deemed *non-objective* and thus subject to a challenge under the discipline. It is also notable that while the EC claims *not* to call for disciplines that would affect “substantive” aspects of domestic regulations, demanding that licensing qualifications should be subject to “some basic, common rules” (section II, at no.10) and use “objective criteria” veer in the direction of substantive restrictions. However, the 1996 WTO Secretariat background note suggests that qualification requirements are different from licensing requirements and are those to that “...are substantive requirements which a professional service supplier is required to fulfill in order to obtain certification or a license. e.g. education, examination requirements, practical training, experience or language requirements”.

¹³⁰ Note that WTO Members are also not yet clearly decided on what exactly is covered by the notion of licensing requirements. According to a WTO Secretariat background note, licensing requirements are requirements, other than qualification requirements, with which a service supplier is required to comply in order to obtain formal permission to supply a service. e.g. residency requirements, fees, establishment or registration requirements. See Secretariat Background Note S/WPPS/W/9.

¹³¹ Such regulation could be viewed as the implementation of the polluter pays principle.

costs. However, in developing countries, where poor areas could not afford water if it were priced to reflect its true value to society, it may be necessary to provide water at “below value”.

Similar to many of the issues discussed in this paper, the question of whether the GATS will affect such policies remains largely unexplored. As explained above, it is far from clear whether and how concession contracts – including policies that set out the negotiation of the financial arrangements contained therein – would be covered by the GATS. If these policies were to fall under GATS Art. VI.4, they would have to comply with the respective criteria and obligations that will be negotiated under this mandate. Pricing arrangements for units of economic activity (for example, of water extracted) have not yet been discussed under GATS Art. VI.4.

Current drafts for future disciplines on domestic regulations do, however, contain provisions for licensing fees that would undermine a country’s domestic ability to use licensing fees as a way to internalize negative externalities. For example, a recent EC proposal to the WPDR holds that “[a]ny fees charged, which are not deemed to include fees determined through auction or a tendering process, are to be commensurate with the administrative cost of processing an application”.¹³² If adopted, this language could eliminate a crucial tool for environmental regulation.

This approach to licensing fees raises important questions:

- it remains undetermined whether licensing fees could be understood to also cover the above-mentioned pricing arrangements in concession contracts.
- it is unclear whether future rules will allow prices based upon negative environmental externalities.

Factoring in such environmental aspects goes beyond merely considering the administrative costs, and could even result in prohibitively high licensing fees. It cannot, therefore, be ruled out that they may be considered an “impediment to practicing the relevant activity”.¹³³

Current draft language in the GATS does not *clearly* prohibit the internalization of negative environmental externalities through licensing fees. At the same time however, it does not clearly allow it. In any case, negotiations are not yet finished, and many GATS provisions, even once adopted, give rise to complex interpretative questions. For these reasons, it is crucial for water management policy makers to carefully follow the relevant WTO negotiating developments and raise relevant environmental issues to avoid negative outcomes.

H Environmental Impact Assessments (EIAs) and Sustainability Impact Assessments (SIAs): Documentation and Information Required for the Granting of Licenses

From an environmental water management perspective, projects affecting natural watershed quality and natural watercourses should only be allowed after a thorough and comprehensive SIA of the project in question has been conducted. Clearly this should be the case for large-scale infrastructure projects, be they the construction and operation of dams, pipelines or other water works, or other projects withdrawing water. For example, the construction of the

¹³² EC Proposal on Licensing, *supra* note 60, section 3, at no. 10. Similarly, the Japanese Draft suggests that “licensing fees charged by the competent authorities have regard to the administrative cost involved, and do not in themselves represent an impediment to practicing the relevant activity ... [t]his shall not preclude the recovery of any additional costs of verification of information processing and examinations”. *supra* note 60, para. 17.

¹³³ Japanese Draft, *supra* note 60, para. 16.

Aswan High Dam in Egypt was undertaken without any environmental impact studies (EISs). As a result, little was known about the very substantial effects the dam would later have on downstream agriculture as well as on increasing salinity in the Nile River. In contrast, the Trans-Alaska Pipeline must undergo a new EIS every time the pipeline's right-of-way is renewed (about every 30 years). As a result, while negative environmental effects of the pipeline are not always mitigated, they can at least be better anticipated and understood.

In many cases, the burden to conduct such assessments and furnish the relevant documentation lies with those who want to undertake the relevant economic activity. The same would apply to the requirement to furnish the relevant documentation.¹³⁴ This type of burden makes sense from both an environmental and economic perspective because it further helps to internalize negative externalities associated with water use.

While advantageous from an environmental and macro-economic perspective, such burdens are often seen as unreasonable by private sector service providers. Companies, foreign and domestic, have complained that requirements related to assessments and providing the relevant documentation are time-consuming, costly and bureaucratic, frequently involving several administrative entities and processes. Such processes are particularly hard for foreign service providers to follow, not being familiar with local administrative structures and customs. Such requirements could be considered a barrier to trade, in which case the GATS could be seen as a remedy.

Again, the GATS provision most relevant to this scenario would be Art. VI.4. Most likely such requirements would fall under future disciplines on domestic regulations. In the context of licensing requirements, current negotiating documents contain language suggesting that “[e]ach Member shall endeavor not to require more documents than are strictly necessary for the purpose of such licensing, and shall endeavor not to impose unreasonable requirements regarding the format of such documentation.”¹³⁵ Would environmental or sustainability impact assessments involving the state and quality of water resources or the extent to which they would be affected by future projects be considered “strictly necessary for the purpose of ... licensing”,¹³⁶ or would they be considered “unreasonable requirements”?

Moreover, current draft negotiating proposals also call for reducing licensing procedures to one competent authority,¹³⁷ so that service suppliers would have only to deal with one authoritative body or official in the licensing process. While ostensibly this would streamline the process, it also opens the door to possibly eliminating or curtailing EIA and SIA processes, as WTO Members could potentially protest being subject to authorities deemed extraneous. Going even further in this direction, the same draft language states that application and renewal procedures should be “as simple as possible”¹³⁸ – again raising the concern that any efforts to streamline licensing could jeopardize aspects of the procedure that,

¹³⁴ For example, a services provider may have to provide full documentation of an environmental impact study as part of a concession contract application.

¹³⁵ Japanese Draft, *supra* note 60. Again, the EC Proposal on Licensing contains extremely similar language: “Document requirements for obtaining a license shall not impose unreasonable requirements regarding the format of documentation”. EC Proposal on Licensing, *supra* note 60, section III, 1.2, no. at 6.

¹³⁶ It could be argued that the rationale of the respective licensing requirements is sustainable water management and therefore impact assessments and related requirements are strictly necessary to achieve that goal. However, the current GATS legal text does not explicitly recognize the protection of the environment, or the preservation of water as a fundamental natural resource, as a legitimate policy objective. Therefore, concerns cannot be outright dismissed.

¹³⁷ The EC Proposal on Licensing states that “Applicants shall, in principle, have to approach only one competent authority in connection with an application for a licence [*sic*]”, *supra* note 60, section III, 1.1, at no. 4.

¹³⁸ *Id.*

from a supplier's point of view, constitute "red tape" but from an environmental or public health perspective are critical.

To date, many of these issues remain largely unexplored. Thus, water management policy makers would be wise to start raising pertinent questions and carefully monitor the relevant developments and discussions in current negotiations.

I Land Ownership: Preserving Water by Regulating the Use and Ownership of Land

Regulating land use and ownership, primarily through zoning, is another crucial feature for water and wetland conservation policies. By regulating land use, zoning can control the distribution of industry which could potentially harm water. For example, by limiting the number of industrial zones along a river, a municipality may minimize environmental damage to the river, or it may preserve the quality of ground water. A government may also declare protected areas of various kinds either to safeguard water sources or to ensure that critical habitats or wildlife are conserved. As well as affecting the use of the land and water in question, this may also have implications for upstream and downstream water users (for example, the establishment of a protected wetland in Australia under the Ramsar Convention¹³⁹) imposes restrictions on new or amended upstream water or land uses.

Another option may be to restrict the ownership of certain lands. Some countries, for example, have laws that restrict foreign companies from owning land in border areas or land containing *inter alia*, agriculture, forestry, pasture and water sources.

Does the GATS impact these policies and, if so, to what extent? Restricting private ownership of land with springs to nationals may constitute a national treatment violation. In effect, the EC has taken this approach. It has asked WTO Members that currently are unbound in mode 3 as regards purchase and lease of land in forestry, fishing, pasture....mines and sources of water, to "remove this restriction."¹⁴⁰

In addition, there are negotiating proposals suggesting that zoning regulations be covered by GATS. In current discussions, WTO Members have attempted to develop lists of exemplary measures that would fall under future disciplines, and zoning regulations have been included. While this would render the possible scope of future disciplines for domestic regulations extremely broad, it should be noted that mere coverage of zoning regulations would not prohibit them outright. Rather, zoning regulations would have to comply with certain criteria, set out in future disciplines. To date, however, the content of these disciplines is far from determined. Thus, land use, environmental and water policy makers should carefully follow negotiations on domestic regulations to ensure that future disciplines will not constrain their regulatory prerogatives.

J Cutting across all Environmental, Water Preservation and Other Domestic Regulation: The GATS Negotiating Mandate on Domestic Regulation

Previous sections have discussed specific challenges that future GATS disciplines on domestic regulation may pose to national policies to protect and conserve water, wetlands and ecosystems. Examples are challenges to qualification requirements for services providers, to policies recognizing the true economic value of water, to environmental impact or

¹³⁹ "Convention on Wetlands" <http://www.ramsar.org>.

¹⁴⁰ EC request to Taiwan, available at: <http://www.gatswatch.org/docs/offreq/EUrequests/Taiwan.pdf>

sustainability impact assessments and to land use or zoning regulations. These specific challenges are based primarily on recent Japanese and EC submissions under Article VI.4 of the GATS.¹⁴¹ There are additional cross-cutting challenges that merit attention. These stem primarily from the general negotiating mandate contained in Art VI.4, the Japanese Draft Annex on Domestic Regulation and an earlier EC communication in that context.¹⁴²

Civil society and domestic regulators are concerned that following this negotiating mandate¹⁴³ and the documents submitted there under, Members will incorporate a “necessity” or “proportionality” test as an explicit requirement for non-discriminatory domestic regulations.

“Necessity” tests are a standard feature of the WTO legal framework. According to GATT and WTO jurisprudence, a “necessity” test asks whether there is any alternative to the domestic measure in question, which the country “could reasonably be expected to employ” and “which is not inconsistent with other GATT provisions” or “which entails the least degree of inconsistency with other GATT provisions.”¹⁴⁴ To date, the “necessity” test has proven hard to satisfy. The WTO legal framework does not contain “proportionality” testing. Under other legal frameworks (such as that of the EC), “proportionality” tests entail weighing and balancing a measure’s trade restrictive effects against the policy objectives pursued.

In the context of negotiations surrounding GATS Art. VI.4, however, the EC is suggesting the inclusion of such a test. Whilst the EC suggests that “the validity, or rationale, of the policy objective[s] must not be assessed”, in practice, it would likely be very difficult to balance trade restrictiveness against the legitimate policy objectives without questioning the validity of those objectives. Moreover, as shown in past case law, the importance of legitimate objectives has already proven to be a decisive factor in whether a measure passes the “necessity” test. Since value assessments of this nature have already been applied under the “necessity” test, it is reasonable to expect that a “proportionality” test *would* consider the validity of policy objectives.

Inclusion of either a “necessity” or “proportionality” test would pose considerable threats to domestic regulations that aim to protect water, wetlands and eco-systems. The threat is exacerbated by the fact that none of these policy objectives are explicitly recognized in the existing GATS legal framework. While it may be unlikely that WTO panels or the AB would call policy objectives as vital as the conservation of water, illegitimate, they still would have the power in a trade dispute to judge whether the policy in question is the least trade-restrictive way to achieve the objective of conserving water.

The mere fact that policies could be subject in this way to WTO scrutiny in a trade dispute might have a “chilling” effect on domestic environmental policy making. Water policy makers should be free to pursue water conservation objectives and design and implement relevant policies without pressure to reduce trade or other economic impacts. This is particularly important as current negotiations are likely to produce these tests as part of generally applicable disciplines. This would effectively allow trade tribunals to scrutinize domestic policies, having deep effects for all sorts of water management policies, ranging from technical standards for the operation of dams, to zoning regulations for wetlands, to SIAs and many more.

¹⁴¹ Japanese Draft and EC Proposal on Licensing, *supra* note 60.

¹⁴² EC Proposal on Necessity, *supra* note 54.

¹⁴³ Specifically the negotiating mandate in Art VI.4 of the GATS mandates WTO Members to develop any necessary disciplines “[w]ith a view to ensuring that measure relating to qualification requirements and procedures, technical standards and licensing requirements do not constitute unnecessary barriers to trade in services....”. In that vein, “[s]uch disciplines shall aim to ensure that such requirements are, *inter alia*:... (b) not more burdensome than necessary to ensure the quality of the service:”

¹⁴⁴ *US – Section 337 of the Tariff Act of 1930*.

K Cutting across all Environmental, Water Preservation and other Domestic Regulation: The GATS National Treatment Obligation

Several of the above sections have implicitly referred to questions surrounding national treatment. National treatment obligations are set out in GATS Art. XVII. The most obvious example of domestic water regulations that may conflict with the GATS national treatment obligation is a domestic measure that restricts ownership of land with springs to nationals. Other examples are regulations that grant indigenous people preferential access to water use, including for agricultural or fishery purposes.¹⁴⁵ While any judgment would be dependent upon many detailed legal questions (such as what are “like” services or “like service providers”), regulations that on their face discriminate between “domestic” and “foreign” interests risk falling afoul of the GATS national treatment obligation.

However, the GATS national treatment obligation not only prohibits measures that explicitly discriminate between “domestic” and “foreign” but also *de facto* discriminatory measures. These are measures that – without clearly singling out national service suppliers or their services for better treatment – indirectly result in negative effects on *foreign*-service suppliers. This is particularly problematic as these *de facto* discriminatory effects of a regulatory measure are hard to anticipate. In many cases whether a measure exhibits such negative effects on foreigners depends on the nature of the foreign-service supplier, on practical market conditions or on consumer preferences. Given that this pertains to all governmental regulations – irrespective of their regulatory goal – domestic water laws also run the risk of creating such *de facto* discriminatory effects.¹⁴⁶ Even the Directorate Trade of the EC itself¹⁴⁷ voiced concern that neutral governmental measures and regulations, which “may be fully justified on environmental grounds”, can have *de facto* discriminatory effects on foreign services suppliers and should therefore be prohibited once a WTO Member has made a commitment under GATS Art. XVII.¹⁴⁸

Unfortunately, while being discussed in academic and civil society circles, concerns about the *de facto* discrimination obligation in the GATS have not made their way into the respective market access requests.¹⁴⁹ Water policy makers may wish to flag these concerns and suggest that trade policy makers rule out the prohibition of *de facto* discriminatory measures by including relevant horizontal limitations, both for existing and future national treatment commitments.

¹⁴⁵ There are important questions surrounding the legal status of indigenous peoples in various Constitutions. While the more explored ones are questions about whether or not indigenous peoples are considered “nationals” of a particular country, it is far less explored to what extent economic or subsistence activities of indigenous peoples would render them domestic “services providers” under the GATS.

¹⁴⁶ Similarly, as noted in Section V, C, language in the EC Proposal on Licensing could go even further than prohibiting regulations that constitute *de facto* discrimination of foreign investors. By forbidding any regulations that “constitute, in themselves, a restriction on supply of services” (*supra* note 60, section III, no. 17), the EC document could be interpreted as suggesting that any regulation curtailing commercial activity in the supply of services – whether or not it is discriminatory – can be challenged by a foreign supplier under the GATS.

¹⁴⁷ EC Directorate General for Trade, Note to the Ad hoc 133-Committee Services (October 2000).

¹⁴⁸ This aspect is also discussed in academic and other trade law related literature. See also Werner Zdouc, *GATS Dispute Settlement Practice* (1999).

¹⁴⁹ Note that the notion of “market access request” is broader than request under Art. XVI, the GATS market access provision. Rather, the term “market access request” refers to the requests being made in the bi-lateral market access negotiations, thus also encompassing requests under the GATS national treatment obligation.

L The GATS Environmental Exception: Can Art. XIV Help?

Concerns about potential constraints on domestic environmental policies are exacerbated when one considers that the GATS does not include an environmental exception, designed to safeguard measures that aim to protect natural resources.¹⁵⁰ Art. XIV of the GATS includes several “general exceptions” that justify measures that would otherwise be prohibited under the GATS. These include an exception for measures “necessary to protect human, animal or plant life or health”. However, unlike the general exception in GATT, the GATS general exception does not contain a specific provision allowing governments to undertake measures “relating to...natural resources”. Lack of similar language in the GATS may result in less leeway for domestic water regulations to put in place measures to protect and preserve water resources.

This limited flexibility arises mainly from two aspects. First, while measures aiming to protect and preserve water are ultimately undertaken to protect human, animal or plant life and health, they most clearly would qualify as measures “relating to the conservation of exhaustible natural resources”. Second, measures saved by a provision phrased along the lines of the GATT exception for natural resources would not have to pass a so-called “necessity” test.¹⁵¹ Rather, a party relying on the GATT natural resource exception is only required to establish that the measure is *relating to* the protection of the natural resource, without having to be *necessary* to it. Past case law has shown that the “relating-to” requirement is easier to meet than the necessity test.¹⁵² Thus, domestic water laws would arguably more easily pass under language similar to the GATT natural resource exception.¹⁵³

Unfortunately, the GATS negotiating agenda does not contain any mandate to change the text of the GATS general exception. There has been a limited discussion on this issue in the WTO’s Committee on Trade and Environment (CTE). However members of the CTE see no need to substantively address this issue.¹⁵⁴

Nonetheless, water policy makers should raise this issue in the context of the current negotiations on trade in services. Drawing attention to the limited nature of the GATS exception may persuade WTO Members to refrain from making broad commitments. They may also realize the need to examine this issue from a systemic point of view, possibly in the

¹⁵⁰ For a more comprehensive analysis see: Fuchs, Peter and Elisabeth Tuerk, 2001, *The General Agreement on Trade in Services (GATS) and future GATS-Negotiations -- Implications for Environmental Policy Makers*, Paper prepared for the German Federal Environment Agency (2001). Available at <http://www.umweltbundesamt.de>.

¹⁵¹ For an analysis of various interpretative approaches to this “necessity test”, see Neumann, Jan and Elisabeth Tuerk. *Necessity Revisited - Proportionality in WTO Law after Korea- Beef; EC-Asbestos and EC-Sardines*; Journal of World Trade, Vol 37 No 1 February 2003; Kluwer Law International; Osiro Deborah, *GATT/WTO Necessity Analysis: Evolutionary Interpretation and its Impact on the Autonomy of Domestic Regulation*, LIEI 29/2 (2002), 123-141;

¹⁵² Appleton, Arthur. *GATT Article XX’s chapeau: A disguised ‘Necessary’ Test?* RECIEL 6 (1997), 131-138 (136): “... Article XX(b) test is also in need of reappraisal. ... the terms of the ‘necessary’ test are extraordinarily difficult to satisfy.”; Esty, Dan. *Greening the GATT. Trade, Environment, and the Future*, 1994, 48, 127, 222; Schoenbaum, Thomas. *International Trade and Protection of the Environment: The Continuing Search for Reconciliation*, AJIL 91 (1997), 268-313 (276 f.); Howse, Robert and Michael Trebilcock. *The Regulation of International Trade*, 2. ed. 1999, 164 f.

¹⁵³ Following through on this limited suggestion would provide a first useful step. It would not however, neither remedy all the flaws and problems in the GATS nor provide a more adequate framework for the interaction between trade and environmental policies more general.

¹⁵⁴ See WTO: *Environmental Issues raised in the Services Negotiations*, paragraph 51; Statement by Mr. A. Hamid Mamdouh at the Regular Session of the Committee on Trade and Environment of 29-30 April 2003; WT/CTE/GEN/11, 15 April 2003.

context of the GATS technical review.¹⁵⁵ Whatever the outcome, it is important to draw attention to this shortcoming in the GATS.

¹⁵⁵ Following through on this limited suggestion would provide a first useful step. It would not however, either remedy all the flaws and problems in the GATS or provide a more adequate framework for the interaction between trade and environmental policies more general.

Section VI Conclusions and Policy Recommendations

A Conclusions

The main goal of water management policies is to protect and preserve water – a highly sensitive and precious natural resource. To achieve this end, policy makers work with the principles of flexibility and adaptive management, to respond to changes in society's expectations, development needs and environmental quality. A technical standard for pollution discharges that may appear adequate at one point in time may require tightening and strengthening in light of new scientific evidence or ecological developments, such as droughts. Similarly, ecological flow requirements may require permissions for the extraction of water at one level, but may require adaptation of these levels if generally less water is available. Once allocated, licenses might need changing, property rights might be affected and service providers may consider the effects of such policies as limits on their ability to offer their services in a region's market.

GATS obligations however, aim to achieve market access, legal security and predictability for service providers by “locking in” certain domestic policy choices. Once a WTO Member has agreed to be bound by a certain specific commitment it is virtually impossible to reverse this commitment. A similar situation occurs with respect to GATS general obligations. Once WTO Members have agreed to certain language, any changes are hard to obtain. This approach, to enshrine a given level of liberalisation, conflicts with the need for flexibility as set out in water management policies. Difficulties in reversing obligations, once agreed upon, are even more worrisome, as WTO Members – when negotiating new rules and commitments – hardly discuss the potential problems that the wording of new obligations may pose on domestic water management policies.

The following section summarizes a series of instances where potential for conflict between GATS disciplines and domestic policies to protect and conserve water, wetlands and ecosystems is most clearly emerging.

1. The GATS covers a broad range of regulatory entities responsible for water management and conservation issues

The GATS not only applies to central governmental entities and their regulatory activities in so far as they affect trade in services, but also to regional authorities, municipalities and non-governmental or quasi-governmental bodies, which exercise powers delegated by central, regional or local governments or authorities. With water management policies increasingly set at the regional level, and often by non-governmental bodies (for example, at the river basin level), awareness of the GATS as well as the WTO negotiating process must trickle down to these lower levels. Raising awareness about the GATS would allow these covered entities to influence negotiations with a view to ensuring that outcomes do not further constrain their regulatory functions and activities.

2. The GATS affects policies that regulate the granting of water rights

Even with the GATS being silent as regards the ownership of the *corpus* of water, in so far as they affect trade in services, policies that regulate the granting of water rights (rights to extract, access or otherwise use water) are still covered by the GATS. In response, specific market access negotiating proposals repeatedly state that they do not imply access to water resources (environmental services), but rather acknowledge that natural resources are held in trust for the public (energy services). However, policies that regulate access to water would still be covered by the agreement itself and it is not clear whether the language currently contained in negotiating proposals will translate into actual commitments. This is problematic

– from an environmental perspective – because the granting of water rights is an important policy tool to avoid over-exploitation of water. Specifically, governments need flexibility to allocate and revise water rights, whether as a right to use or as a property right to the *corpus* of the water itself.

3. *The GATS market access provision (Art. XVI) prohibits certain policies that aim to avoid over-exploitation of water resources by establishing certain quantitative limitations on service provision*

For countries that have entered into full and unconditional commitments under the GATS market access provision, Art. XVI prohibits placing certain limits on the *number of services providers*, the total *value of service transactions*, the total *number of service operations* or the *quantity of service output* allowed in a geographical region. However, licenses, concessions and permits frequently aim to avoid over-exploitation of water by establishing such clear quantitative limitations for service provision. By taking away a regulator's ability to set such quantitative limitations (such as for services including water collection or tourism and transport operators conducting business on a water course), a highly effective regulatory tool for protecting the environment may be compromised.

4. *The GATS market access provision (Art. XVI) creates legal insecurity for policies that aim to protect water by establishing quantitative caps either on the water available for economic activity or on the impact that operations of service suppliers have on water*

To date, it is unclear to what extent the GATS market access obligation would prohibit policies that aim to preserve water by placing limits on the *impact* that the *operations of service suppliers* have on the quality or the amount of water available. Some interpretations suggest that for a domestic measure to be deemed inconsistent with the GATS it must not only have the *effect* of creating a certain quantitative limitation, but it must also take a certain *form*, thus establishing a stricter criterion for finding a policy to be in violation of the GATS. While this is not yet a broadly accepted interpretation, from an environmental perspective it would be important to limit the market access obligation to that effect. Specifically, this is because limiting the actual *impact* that operations of service suppliers have on the quality or the amount of water available is a crucial policy tool.

Similarly, there is lack of clarity as to what extent the GATS market access obligation would prohibit policies that aim to preserve water by placing limits upon the amount of water that is used as an input into service delivery processes. While a footnote to Art. XVI 2(c) appears to allow such measures this is not the case for the other sub-paragraphs of Art. XVI. From an environmental and water management perspective, there is no reason for only selectively allowing such conservation policies.

5. *Future disciplines on domestic regulation may limit how regulators establish and verify the necessary professional qualifications for service providers whose activities affect water*

In negotiations for future disciplines on domestic regulations WTO Members are designing rules for qualification requirements and procedures. While the content of these rules is ambiguous, it is important to ensure that WTO rules will not compromise WTO Members' abilities to set and implement their own levels and standards for qualification requirements. Domestic regulators need to retain the authority to ensure that services providers affecting natural resources such as water have appropriate job experience, educational background and professional qualifications.

6. *Future disciplines on domestic regulation may constrain WTO Members' abilities to use licenses, permits or technical regulations and standards to protect and preserve water, including to regulate discharge of pollutants or to operate facilities*

Current negotiations indicate that technical regulations, licenses or standards would be covered by future disciplines on domestic regulations. There are concerns that some of the proposed features may constrain regulatory prerogatives. While past concerns focused on the constraints of legally enforceable “necessity” or “proportionality” tests, in response to new drafting language they now focus on the requirement that WTO Members apply technical standards “only to fulfill” certain national policy objectives. While the stringency of the “only to fulfill test” is unclear, the closed list of national policy objectives in GATS Art. VI.4 stops short of mentioning the protection of the environment and natural resources.

The exact content of future disciplines for technical standards is crucial, as the rules would also cover regulations that aim to protect and preserve water, water-courses and wetlands. South African standards for discharges, technical conditions authorizing the taking of water or European technical standards for emitters may serve as cases in point.

7. *Future disciplines on domestic regulation may constrain WTO Members' abilities to include environmental considerations when setting licensing fees and determining financial aspects of concession contracts in the water sector*

Future disciplines on domestic regulations may also contain rules for licensing fees. Current language suggests that licensing fees should reflect the administrative costs involved in issuing the license and should not constitute an impediment to practicing the relevant activity. The extent to which future disciplines will also cover financial arrangements in concession contracts remains far from clear. If financial arrangements were forced to consider only administrative costs, much flexibility in this important administrative tool may be lost. From an environmental perspective this may be problematic, as financial considerations in licensing and concession contracts are useful tools for internalizing negative externalities associated with water consumption.

8. *Future disciplines on domestic regulation may constrain WTO Members' abilities to require potential license holders to conduct thorough sustainability impact assessments and to furnish the respective documentation*

Future disciplines under GATS Art. VI.4 may oblige licensing authorities to require only those documents which are “strictly necessary” for the purpose of the license and not to impose “unreasonable requirements regarding the format” of such documentation. Conducting comprehensive SIAs may not fulfil this “strictly necessary” category. In addition, requirements to furnish this type of documentation may be seen as “unreasonable” under future Art. VI.4 disciplines. This can be problematic from an environmental point of view, since the environmental implications of many services projects, especially dams, pipelines and other large-scale infrastructure projects, may not be fully realized without a thorough and comprehensive environmental impact study or SIA.

9. *The GATS might be (mis)used to eliminate policies that aim to preserve water by regulating the use and ownership of land with springs*

In current GATS negotiations to deepen countries' specific commitments, certain Northern countries have requested the elimination of policies that restrict ownership of land with springs to nationals of a particular country. Similarly, some WTO Members suggest that zoning regulations be covered by future disciplines negotiated under GATS Art. VI.4. Such disciplines may also cover zoning regulations that address the spread of industry or otherwise help to protect watersheds, water resources and wetlands, including by restricting upstream

and downstream uses of water that may arise as a result of protected areas of various types. The fact that such regulations may have to meet strict necessity requirements may effectively constrain or create a “chill factor” for domestic regulatory practices. Similarly, national regulations restricting the ownership of land with springs to nationals have already been targeted in current request-offer negotiations. However, both constitute important policies for achieving environmental objectives.

10. *The GATS domestic regulation negotiating mandate (Art. VI.4) may result in future disciplines that unduly constrain regulatory prerogatives across the board*

As noted earlier, the GATS Art. VI.4 negotiating mandate may result in future disciplines posing undue constraints on domestic regulators, in particular if a necessity or proportionality test is adopted. These standards would potentially allow dispute settlement tribunals under the WTO to evaluate policy objectives and measures used to achieve them in terms of their trade restrictiveness, undercutting domestic prerogatives with global economic interests.

These standards would be particularly problematic if included in disciplines that apply to services trade horizontally across all sectors and independent of any scheduling of commitments (that is, whether a country has scheduled specific commitments in the services sector/mode in question). Rather, domestic policy makers should be able to pursue their regulatory objectives, without having to assess the trade-restrictiveness of regulatory actions and without the fear that a WTO panel may find conservation of a particular ecosystem site not a sufficiently legitimate objective to warrant its trade restrictive effects. The latter could effectively create a chilling effect for domestic regulatory initiatives.

11. *The GATS national treatment obligation (Art. XVII) may unduly constrain regulatory prerogatives across the board*

The GATS national treatment obligation prohibits both, *de jure* and *de facto* discrimination. While the *de jure* obligation prohibits regulatory measures singling out nationals for better treatment, the *de facto* obligation prohibits measures that indirectly result in negative effects on *foreign-service* suppliers. This is particularly problematic as these *de facto* discriminatory effects of a regulatory measure are hard to anticipate. Most likely, also measures that aim to protect and preserve water, wetlands and ecosystems could result in creating such unanticipated effects. Again, this could create a chilling effect for domestic regulatory initiatives.

12. *The GATS environmental exception (Art. XIV) constitutes an inadequate remedy for the challenges that the GATS poses for domestic water management*

Unlike Art. XX of the GATT, the GATS environmental exception does not contain a specific exception for policies “*relating to the protection of natural resources*”. This raises concerns for several reasons. First, measures designed to preserve water would benefit from an exception that specifically is intended to safeguard policies for the conservation of exhaustible natural resources. Second, WTO case law indicates that the requirement for a measure to be *relating to the protection of a natural resource* is easier to meet than the requirement to be *necessary to achieve a certain policy outcome*. Given the concerns raised above about the potential constraints on domestic environmental water management policies, it would only seem reasonable to include a strong environmental exception to safeguard one of the world’s most precious natural resources.

B Policy Recommendations

In light of this analysis, the following recommendations, if implemented, would help remedy these deficiencies and mitigate potential negative effects of the GATS on water services.

The GATS Agreement should be amended to ensure that:

- the *existing general exceptions* also include a specific exception for measures relating to the protection of the environment and the conservation of natural resources, specifically water;
- the *GATS national treatment obligation* does not prohibit *de facto* discriminatory measures;
- the *GATS market access obligation* effectively allows all policies that aim to preserve and protect water by limiting water input into the production and delivery processes of services. Further, market access obligations should only prohibit measures that have both the effect and forms explicitly defined in Art. XVI of the GATS.

Such substantive policy changes can be implemented in various ways. For example, WTO Members can decide to:

- clarify the meaning or authoritatively interpret ambiguities already existing in the GATS legal framework; or
- amend existing rules.

In addition, the course of current GATS negotiations should be changed to increase rather than constrain, domestic regulatory space for policies that protect and conserve water, wetlands and ecosystems. To this end WTO Members should

In the request-offer phase:

- *refrain from making new national treatment or market access commitments* in services trade sectors which may affect water management policies. This would include specifically refraining from entering into commitments based on EC proposals to include the provision of water in the environmental services classification, as well as a rejection of the entire classification system in general.
- *complement existing and future commitments with horizontal conditions/limitations* which effectively safeguard the full range of existing and future water management and preservation policies.

In current negotiations on rule making:

- *refrain from adopting any additional disciplines on domestic regulation.*

Along these lines, if new disciplines on domestic services cannot be avoided, WTO Members should:

- *limit the scope and breadth of future disciplines* by ensuring that these disciplines do not apply horizontally across sectors, or as a general discipline;
- *refrain from using language on necessity*, including new language that would potentially pose unknown constraints on domestic regulatory prerogatives (for example, phrases including, *inter alia*, “strictly necessary”, “only to”, and “proportionate to”);
- *include statements* that the conservation of water, water courses and wetlands – and the protection of the environment and conservation of natural resources in general – are *legitimate national policy objectives*, the effective pursuit of which will not be constrained by international trade rules; and

- ensure that future annexes or disciplines *contain effective safeguards and exceptions* for environmental policies, as well as specific language for water preservation policies.

Overall, negotiations must be accompanied by comprehensive and thorough sustainability assessments which should be conducted through accountable and transparent procedures, involving the relevant stakeholders, including water policy makers.

To achieve this goal, water management policy makers need to effectively participate in relevant negotiations and submit policy recommendations that will avoid negative outcomes for regulatory prerogatives to protect and preserve water, wetlands and ecosystems. Trade policy makers, in turn, need to ensure participatory, open and transparent negotiation and discussion processes, which allow input from affected stakeholders to be heard and taken into account.

To most effectively use increasing openness in negotiating and decision-making processes at the international, regional (European) and national level, water policy makers should:

- conduct analysis in order to provide substantive input and policy recommendations for their country's negotiating position, as well as assure that WTO discussions on assessments are thorough and comprehensive.

Specifically, the analysis would entail:

- determining what relevant national, sub-national and non-governmental entities are involved in water management processes;
- analyzing which sectors of services trade (such as water, tourism or energy) may be most affected by domestic water management; and
- studying which national policies to preserve and protect water may be most affected by liberalisation of trade in services.

Clearly, trade negotiations are complex and highly political processes. The fact that much of the GATS is still in development makes a clear assessment of its implications and effects a difficult, but vitally important, endeavour. Water management and preservation are also highly complex processes. To date, many domestic water laws are in a state of flux and development. This renders any assessment of possible inconsistencies between the GATS and water policies an even more complex process.

However, the fact that many decisions – particularly in the GATS context – have not yet been taken also provides a unique opportunity to influence not only the outcome, but to provide policy makers responsible for water, wetland and preservation policy with the flexibility to adopt approaches that they consider most suitable and effective to achieve their goals.

References

- Appleton, Arthur. *GATT Article XX's chapeau: A disguised 'Necessary' Test?* RECIEL 6, 131-138 (1997).
- Boelens, Rutger. *Water Law and Indigenous Rights – WALIR: Towards recognition of indigenous water rights and management rules in national legislation*, (2002).
- Caplan, Ruth. *Don't Let the WTO Get Hold of Our Water!* Alliance for Democracy (2003).
- CIEL. *Going With the Flow: How International Trade, Finance and Investment Regimes Affect the Provision of Water to the Poor*, CIEL Issue Brief, (2003). Available at <http://www.ciel.org>.
- Cossy, Mireille. *Water Services and the GATS – Selected Legal Aspects, A Draft Discussion Paper for the Workshop on Trade and Water*. 3 March (2003), Geneva (forthcoming).
- Delmon, Jeffrey. *Water Projects, A Commercial and Contractual Guide*, Kluwer Law International (2001).
- Esty, Dan. *Greening the GATT. Trade, Environment, and the Future*, (1994).
- Friends of the Earth, Briefing, *Stealing our Water Implications of GATS for Global Water Resources*. Available at http://www.foe.co.uk/resource/briefings/gats_stealing_water.pdf.
- Fuchs, Peter and Elisabeth Tuerk, *The General Agreement on Trade in Services (GATS) and future GATS-Negotiations -- Implications for Environmental Policy Makers*, Paper prepared for the German Federal Environment Agency (2001). Available at <http://www.umweltbundesamt.de>.
- GATT Secretariat, *The Relevance of the Disciplines of the Agreements on Technical Barriers to Trade (TBT) and on Import Licensing Procedures to Art. VI.4 of the General Agreement on Trade in Services*, S/WPPS/W/9 (11 September 1996).
- Gould, Ellen. *Water in the Current Round of WTO Negotiations on Services*, Canadian Centre for Policy Alternatives Briefing Paper Series: *Investment and Trade*, Vol. 4, No. 1. (2003).
- Hardstaff, Peter. *The "Flexibility" Myth: Why GATS is a Bad Model for a new WTO Investment Agreement*, paper to Seminar on WTO Investment Agreement, Geneva, 29 March 2003.
- Hilary, John. *GATS and Water: The Threat of Services Negotiations at the WTO*, A Save the Children Briefing Paper, (2003).
- Holden, P. and M. Thobani, *Tradeable Water Rights: A Property Rights Approach to Resolving Water Shortages and Promoting Investment*, World Bank Policy Research Working Paper (1996).
- Howse, Robert and Elisabeth Tuerk, *The WTO Negotiations on Services: The Regulatory State Up for Grabs*; Canada Watch, Vol. 9, No. 1-2. Special Double Issue – *From Doha to Kananaskis: The Future of the World Trading System and the Crisis of Governance*, York University Centre for Public Law and Public Policy and the Robarts Centre for Canadian Studies of York University. (September 2002).

- Howse, Robert and. Michael Trebilcock. *The Regulation of International Trade*, 2. ed. 1999.
- Joy, Clare and Peter Hardstaff. *Whose development agenda? An analysis of the European Union's GATS requests of developing countries*, WDM (April 2003).
- Julsaint, Martine and Mina Mashayekhi, *Assessment of Trade in Services in the Context of the GATS 2000 Negotiations, Trade-Related Agenda, Development and Equity*, Occasional Papers 13, South Centre, (December 2002).
- Kennett, Maxine, Dr. Jan Neumann, Elisabeth Tuerk, *Necessity, Proportionality and Balance*, CIEL Issue Brief. (forthcoming 2003). Available at <http://www.ciel.org>.
- Krajewski, Markus. *Public Services and the Scope of the GATS*, a CIEL Research Paper (2001). Available at <http://www.ciel.org>.
- Krajewski, Markus. *Public Services and Trade Liberalization: Mapping the Legal Framework*, Journal of International Economic Law 6(2), 341-367 (2003).
- Krajewski, Markus. *The Right to Regulate and Obligation to Liberalise – The Impact of the General Agreement on Trade in Services (GATS) on National Regulatory Autonomy*, London: Kluwer Law International (forthcoming, 2003).
- Osiro Deborha, *GATT/WTO Necessity Analysis: Evolutionary Interpretation and its Impact on the Autonomy of Domestic Regulation*, LIEI 29/2 (2002).
- Neumann, Jan and Elisabeth Tuerk, *Necessity Revisited - Proportionality in WTO Law after Korea- Beef; EC-Asbestos and EC-Sardines*; Journal of World Trade, Vol. 37, No. 1 February (2003).
- Schoenbaum, Thomas. *International Trade and Protection of the Environment: The Continuing Search for Reconciliation*, AJIL 91 (1997).
- Shrybman, Steven. *The Impact of International Services and Investment Agreements on Public Policy and Law Concerning Water*, (2002).
- Solanes, Miguel. *Water: Rights, Flexibility, and Governance: A Balance that Matters?* Economic Commission for Latin America and the Caribbean of the United Nations (2002).
- Stillwell, Matthew and Elisabeth Tuerk, *Trade Measures and Multilateral Environmental Agreements: Resolving Uncertainty and Removing the WTO Chill Factor*; WWF International Discussion Paper, (October 1999).
- Stillwell, Matthew and Richard Tarasofsky, *Towards Coherent Environmental and Economic Governance: Legal and Practical Approaches to MEA-WTO Linkages*, WWF/CIEL, (October 2001).
- Tuerk, Elisabeth and Mina Mashayekhi, *The WTO Services Negotiations: Some Strategic Considerations, Trade-Related Agenda, Development and Equity*, Occasional Papers 14, South Centre, (January 2003).
- Tuerk, Elisabeth and Robert Speed. *GATS and Water: A Draft Discussion Paper for the Workshop on Trade and Water*. 3 March 2003, Geneva (forthcoming).

- UN Committee on Economic, Social and Cultural Rights, General Comment No. 15 (2002)
- UNCTAD. *Trade in Services and Development Implications*. Note by the UNCTAD Secretariat Document TD/B/COM.1/55. UNCTAD, Geneva (2002).
- UNHCHR. *Economic, Social and Cultural Rights: Liberalisation of Trade in Services and Human Rights, Report of the High Commissioner E/CN.4/Sub.2/2002*, (June 2002).
- Waskow, David and Vicente Paolo B. Yu III, *A Disservice to the Earth: The Environmental Impact of the WTO General Agreement on Trade in Services (GATS)*. Available at <http://www.attac.de/gats/gatsfoee.pdf>.
- Woodroffe, Jessica and Clare Joy, *Out of Service: The development dangers of the General Agreement on Trade in Services* (March 2002).
- WTO. *Guidelines and Procedures for the Negotiations on Trade in Services*, S/L/93, 29 (March 2001).
- WTO. *Ministerial Declaration*, Ministerial Conference Fourth Session, Doha 9-14 November 2001. WT/MIN(01)/DEC/W/1, 14 November (2001).
- WTO. Note by the Secretariat. *The Relevance of the Disciplines of the Agreements on Technical Barriers to Trade (TBT) and on Import Licensing Procedures to Art. VI.4 of the General Agreement on Trade in Services*, S/WPPS/W/9, (1996).
- Zdouc, Werner. *WTO Dispute Settlement Practice Relating to the GATS*, JIEL (Journal of International Economic Law), (1999).



CENTER FOR INTERNATIONAL ENVIRONMENTAL LAW

The Center for International Environmental Law (CIEL) is a public interest, not-for-profit environmental law firm founded in 1989 to strengthen international and comparative environmental law and policy around the world. CIEL provides a full range of environmental legal services in both international and comparative national law, including: policy research and publication, advice and advocacy, education and training, and institution building.

CIEL's goals:

- to solve environmental problems and promote sustainable societies through the use of law,
- to incorporate fundamental principles of ecology and justice into international law,
- to strengthen national environmental law systems and support public interest movements around the world, and
- to educate and train public-interest-minded environmental lawyers.

WWF is one of the world's largest and most experienced independent conservation organizations with almost 5 million supporters and a global network active in more than 90 countries.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- conserving the world's biological diversity
- ensuring that the use of renewable natural resources is sustainable
- promoting the reduction of pollution and wasteful consumption.



WWF International

Avenue du Mont-Blanc
1196 Gland
Switzerland

Tel: +41 22 364 9111

