

RELATIONS BETWEEN THE EU DEVELOPMENT POLICIES AND THE ONGOING EU POSITION IN THE WTO/GATS NEGOTIATIONS ON THE LIBERALISATION OF WATER SERVICES

REPORT OF MEXICO CASE STUDY

Peter Newborne ODI, London, UK

FINAL REPORT

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The research project on *Relations between the EU Development Policies and the ongoing EU position in the WTO/GATS negotiations on the liberalisation of water services* is one of 23 projects funded by EC-PREP, a programme of research sponsored by the UK Department for International Development (DFID). All EC-PREP research studies relate to one or more of the six focal areas of the European Commission's (EC's) development policy in the context of their link to poverty eradication.

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The project comprises case studies of Mexico, South Africa and Senegal carried out by the Overseas Development Institute-ODI, as well as a synthesis paper also produced by ODI.

<u>This Mexico case study</u> is based on a review of available literature and key informant interviews held in Mexico in November 2004. Interviews were held with a cross-section of stakeholders including government, private sector, NGO representatives and academics.

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It should be noted that the views expressed are those of the author alone and do not necessarily reflect those of the EC or DFID.

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Peter Newborne Research Associate Water Policy Programme Overseas Development Institute p.newborne@odi.org.uk

EXECUTIVE SUMMARY

Differences persist over how best to improve the provision of water services in developing countries. Debate has tended to be polarised around a pro-trade "*versus*" pro-development axis. There are those who argue that water supply and sanitation services (WSS) have been mismanaged by the public sector, and that *liberalisation* is needed to allow both domestic and foreign private sector participation and financing, whilst others are concerned that profit motives within short-term business cycles may not be appropriate in the provision of WSS which they see as being predominantly public goods, and they suggest that governments redouble their efforts to improve access for the poor, supported by Official *Development* Assistance.

The European Union (EU) has adopted positions on both liberalisation and development in relation to water services. First, in 2002, it made requests to over 70 countries to make liberalisation commitments under the General Agreement on Trade in Services (GATS). A key element of the EU's negotiating position is reclassification of 'environmental services' under which 'water for human use and waste water management' would become a new GATS subsector. The EU is requesting that countries make liberalisation commitments on market access and national treatment for the 'water distribution' sub-sector in the current GATS negotiating round. The market access principle prohibits limitations in the participation of foreign service providers (and foreign direct investment) unless specifically listed as a limitation in a country's schedule of commitments, while, under the national treatment principle, governments can elect either to treat foreign services and service suppliers in the same way as domestic services and services suppliers, or include limitations in their commitments to favour the latter.

The current EU development policies on water are set out in the EU Water Initiative (EU WI) which aims to align existing EU spending on water-related development in developing countries by concerted action of different parts of the Commission. The key goal is expressed to be the EU's commitment to the Millennium Development Goals (MDGs), particularly the targets on water supply and sanitation - to halve the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015. In other words, as contemplated by the EU WI, a key aim of EU development policies is "pro-poor" impact.

The question arises: are the "pro-trade" and "pro-development" objectives of EU policy in relation to the water sector consistent and coherent? If pro-trade and pro-development objectives *are* to be compatible and convergent in relation to WSS, it must be possible at a national level to liberalise the market according to GATS principles <u>and</u> to regulate so as to secure (poor) citizens' access. But is that actually the case? GATS principles are detailed and evolving - some rules are still under discussion - with uncertainties as to how they will be interpreted and applied. At the same time, modalities of regulation in the water sector are also in process of evolution as public authorities adapt to a supervisory role over private service providers. So, how does this GATS -v- development relationship operate in practice? To shed light on this question, the European Commission (DG Dev.) has commissioned this study which "maps" the pro-trade *versus* pro-development interaction in three countries, Mexico, Senegal and South Africa, all of which were included in the EU's GATS requests for liberalisation of WSS and where existing markets offer opportunity for analysis in "live" situations.

The focus of this Mexico case study is the "Federal District" at the centre of Mexico City. Rapid population growth in the Federal District over recent decades (to c. 8.5 million now), has added to the considerable challenges of maintaining an adequate supply of water to the various zones of this large city, located as it is in the water-scarce Valley of Mexico. At present the interface between GATS/free trade principles and development in relation to water services in Mexico is limited. Water services are subject to the "domestic" regime, i.e. as defined by Mexican law and policy, not international GATS rules. In the Federal District, the regime substantially circumscribes, in a number of respects, the scope of trade and international trade in water services, e.g. through limits on foreign capital participation. The approach to private sector participation (PSP) adopted by the public authorities in the Federal District has been gradualist, with limited delegation of functions to the private sector, including non-Mexican companies, in a first round of contracts (service contracts) and a modest increase to that divestment of responsibilities in a recent second round (with addition of an incentive element). In other words, the freedom of the government of the Federal District to regulate the provision of water services as it chooses is not at present constrained by GATS principles because these do not apply, nor by free trade principles because their application is limited.

Such is the current situation. This study, however, also considers how this situation may evolve, since the purpose of the EU request is to encourage future GATS commitments on water services. Could there be, in relation to water services in the Federal District, more pro-trade "*versus*" pro-development interaction in the future, and, if so, would this be characterised by compatibility and convergence, or conflict? The indications are that the current position is not likely to change, at least in the foreseeable future. The signs (such as are available for analysis) are that the present gradualist approach to PSP will be maintained. Both trade and water officials in Mexico favour strengthening of regulation before further opening the sector to private participation and in particular to "free" foreign participation.

The analysis carried out for this study suggests that, in relation to water services, a gradualist approach will be sensible in relation also to GATS. GATS presents a considerable capacity challenge for developing countries. Water officials (everywhere) need to build up their understanding of the content of the different GATS rules, how they are interpreted internationally under World Trade Organisation (WTO) procedures/auspices, and especially how they may apply to water services. The exchanges during the project between trade and water specialists have revealed the extent of dialogue and learning required at the GATS-water sector interface. A cautious step-by-step approach to GATS rules will increase the likelihood of understanding correctly how they would take effect if committed to and of assessing positive and negative consequences of commitment - and on that basis deciding what limitations to list to commitments. Two examples in this report illustrate the detailed analysis required and the care, and prescience, likely to be needed when limitations to commitments are formulated in GATS "offers"; first, the implications of the GATS rule on market access in relation to competitive bidding; secondly, the consequences of the rule on "irreversibility" in relation, for example, to return of water service functions to the public sector after a period of delegation to private companies. Where GATS rules have not yet been fixed, they represent a particular challenge, e.g. the rule on subsidies (it seems that this is not likely to prohibit cross-subsidies, a common feature of water pricing, but this should be further reviewed as the rule is evolved).

In Mexico, it is widely recognised that "public good" aspects of water resources make the sector different from other service sectors, e.g. telecommunications and finance, and that the application of free trade principles and, potentially, GATS rules to the water sector is a sensitive social and political issue. In this and other developing countries, an **increase in capacity** of government, including at municipal level, to make informed choices in relation to GATS is more likely to translate - over time - into regulatory "checks and balances", supported by corresponding limitations to GATS commitments formulated in GATS offers, which will ensure that water services providers, including private sector operators, are supervised so as to achieve desired development objectives, including improved and extended access to water supply for poor households.

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LIST OF ABBREVIATIONS

CNA	Comisión Nacional del Agua - National Water Commission, Mexico
DF	Distrito Federal – Federal District, Mexico
EC	European Commission
EU	European Union
EU WI	EU Water Initiative
GATS	General Agreement on Trade in Services
MCMA	Mexico City Metropolitan Area
MDG	Millennium Development Goal
MEAs	Multilateral Environmental Agreements
MFN	Most-favoured nation
NAFTA	North American Free Trade Treaty
NGO	Non-Governmental Organisation
ODI	Overseas Development Institute
PSP	Private sector participation
SACMEX	Sistema de Aguas de la Ciudad de México - Water Systems for Mexico City
SCM	Subsidies and Countervailing Measures (the WTO's agreement on)
SEMARNAT	Secretaría de Medioambiente y Recursos Naturales - Mexican Ministry of Environment
	and Natural Resources
SMEs	Small and medium enterprises
WRM	Water Resources Management
WSS	Water Supply and Sanitation
WSSD	World Summit on Sustainable Development
WTO	World Trade Organisation

INTRODUCTION

Research Issue

The issue addressed by this study is how the European Union's (EU's) objectives in the ongoing General Agreement on Trade in Services (GATS) negotiations on liberalisation of water services relate to the EU development policies in relation to water: are the "pro-trade" and 'pro-development' objectives of EU policy in relation to the water sector consistent and coherent? This research issue is depicted in Figure 1.

Figure 1.



"Free trade under GATS" here refers, first, to the GATS <u>equal market access</u> and <u>national</u> <u>treatment</u> principles (see further below).

GATS also includes a principle of <u>irreversibility</u>. World Trade Organisation (WTO) Members can modify their schedules of specific commitments or withdraw any commitment, but in such circumstances any Member may ask for compensation which, if agreed upon, must be extended to all Members. The implications of this principle in relation to the water sector are also discussed in section 6 below.

Further, GATS envisages the development of rules on <u>subsidies</u> to eliminate trade-distorting effects which are under discussion in the current GATS 2000 negotiations. The question of whether subsidies in the water sector might be trade-distorting is considered in section 6. below.

In 2002, the EU made *requests* to 72 countries to make GATS commitments in relation to water services¹. Core to the EU's negotiating position is the reclassification of 'environmental services'. The nature of the EU request and the proposed re-classification is explained below².

As to "development", this is of course a broad term admitting various interpretations and definitions. The current EU development policies on water are set out in the recent EU Water Initiative (EU WI), so, for the purposes of this study, the relevant development objectives are those embodied in the EU WI. As described below, the objectives of the EU WI are essentially to support provision of improved water access for the poor in low and middle-income countries (hence the reference in Figure 1 to "pro-poor impacts").

¹ Requests and offers under GATS are usually not public, but the requests of the EU to 109 countries were made available (requests to the EU have also been made public, but not by country).

 $^{^{2}}$ As is the fact that the EC and its Member States have made, subsequently in January 2005, *revised* requests in which it has modified the approach - see further below.

Case Studies

This research issue has been examined in case studies - in selected cities in three countries, Mexico, South Africa and Senegal. The studies help to illuminate a range of aspects of the subject, according to the status of water services and the decisions which have been taken by the public authorities in that country.

These three countries were included in the above 2002 EU request, asking each of the 72 governments to make liberalisation commitments in the 'water distribution' sub-sector in the current negotiating round of GATS.

Limit on Scope of Case Studies

When carrying out these case studies, in view of the time available, the method has been to carry out research through interviews with representatives of key actors, as well as a desk study of written materials as are available in each case, in order **to map the pro-trade versus pro-development interface**. Each is a "live" example of how this interaction is currently manifesting itself in practice, with indications as to how it may do so in future (to the extent those are available).

It is also important to note that **the aim of this study is <u>not</u> to carry out an in-depth study of whether or not PSP is successful in the water sector,** but how the pro-trade *versus* pro-development relationship appears in practice in several example situations.

The focus of the studies has been on the provision of water services in the <u>urban</u> context because, in middle/low income countries, it is in the large/medium conurbations that private water companies with international operations are participating - where a market for international water companies currently exists³.

The discussion during the meeting in Brussels on 9th November, 2004 between representatives of the European Commission (EC) and the Overseas Development Institute (ODI) showed that this "mapping" exercise includes <u>process</u> elements as well as content. Whilst content and process are naturally inter-related, a number of important process aspects are discussed separately in section 7 of this report.

Ongoing GATS Negotiation

At the multilateral level, the GATS governs liberalisation in trade in services. The GATS consists of three core elements - see **Box 1**.

As regards the <u>market access</u> principle, referred to in Box 1, the GATS Article XVI prohibits limitations in the participation of foreign capital for foreign direct investment. However, governments can continue to impose such conditions on firms – in sectors where they undertake to allow foreign firms to establish a presence - by inscribing them in their schedules of commitments. Measures that restrict or require specific forms of legal entity are also prohibited, as well as limitations on the number of suppliers, the total value of transactions, quantity of output, and total number of foreign workers.

³ This is not to ignore the fact that provision of safe, sustainable water services in *rural* contexts, in line with the targets set out in the Millennium Development Goals, also represents a great (or even greater) development challenge.

Box 1.

Core Elements of GATS

The first GATS element consists of general rules and principles governing trade in services (see Appendix 1). Among others, these provide for disciplines on transparency (Article III) and most-favoured-nation (MFN) treatment (Article II). The framework is still incomplete, and modalities on certain issues such as emergency safeguard measures (Article X), subsidies (Article XV), domestic regulation (Article VI) and government procurement (Article XIII) continue to be developed.

Secondly, the GATS includes a series of specific annexes pertaining to regulatory principles agreed in specific service sectors (air transport, financial services, maritime transport and telecommunications) and decisions on specific issues (movement of natural persons).

The third element of the GATS consists of schedules of commitments which outline the liberalisation of each Member. Sectoral schedule commitments concern <u>market access</u> (Article XVI) and <u>national treatment</u> (Article XVII) within designated sectors. Such commitments identify the services by mode of supply for which the Member guarantees market access/national treatment and any limitations that may be attached.

Under the GATS <u>national treatment</u> principle, embodied in Article XVII, governments can elect either to treat foreign services and services suppliers in the same way as domestic services and services suppliers, or include limitations in their schedule of commitments in favour of the latter.

The GATS distinguishes between four modes of supply through which services can be traded:-

- <u>Mode 1</u>: cross border supply services supplied from the territory of one Member into the territory of another;
- <u>Mode 2</u>: consumption abroad services supplied in the territory of one Member to the consumers of another;
- <u>Mode 3</u>: commercial presence services supplied through any type of business or professional establishment of one Member in the territory of another; and
- <u>Mode 4</u>: presence of natural persons services supplied by nationals of one Member in the territory of another.

For any given service sector in which a WTO Member chooses to make a commitment, it can set limits sector-by-sector and mode-by-mode with regard to market access and national treatment commitments, i.e. above so-called 'horizontal' restrictions that may be maintained across the board (i.e. applicable to all sectors, as is often the case with limitations on foreign investment or the temporary entry of service suppliers), countries have eight separate opportunities to indicate how they will treat foreign service suppliers in any given sector.

These commitments are based on a positive-list approach, whereby **only those sectors and modes of supply that WTO country members propose for liberalisation are subject to market access and national treatment disciplines**. This *à la carte* approach to liberalisation allows (at least at the outset) countries considerable discretion in deciding which sectors and modes of supply are subject to liberalisation commitments, as well as flexibility within sector-

specific commitments. WTO members have the flexibility <u>in principle</u>⁴ not to include entire sectors (including water services) from any liberalisation "disciplines" (to adopt the term used by trade specialists⁵). They also have the flexibility within offers to condition liberalisation by keeping some components of services unbound, or by accompanying offers with conditions or limitations such as ensuring universal access. The onus is on the committing country to provide for the limitations to the application of GATS rules that it wishes, in terms which are clear and effective for that purpose.

WTO members made GATS commitments at the end of the Uruguay Round or, for those countries which have since acceded to the WTO, afterwards. By sector, the services most frequently included in Member's schedules of commitments are those areas traditionally considered to carry low levels of restrictions (tourism), but also core infrastructure services such as financial services and communications. The fewest commitments have been made in social sectors like education, health and those related to water (sewage and sanitation). This reflects the desire of many governments to retain policy discretion in these areas, which are often treated as core public sector responsibilities; some governments have, it seems, been wary of committing these sectors to the GATS market access and national treatment disciplines.

Part IV of the GATS sets out future objectives and the time frame for negotiations on services. As a result of the Uruguay Round, WTO Members committed under Article XIX of the GATS to resume negotiations on all services sectors by later than 1 January 2000 – the 'GATS 2000' negotiations. On the basis of this, all WTO Members agreed to start a new round of negotiations, with a view to "achieving a progressively higher level of liberalization". These negotiations were to be comprehensive covering all sectors. Article XIX emphasises the need to take into account the interests of all participants on a mutually advantageous basis, as well as to provide for special and differential treatment for developing countries. It is on this basis that the GATS 2000 negotiations began on 1 January, 2000. The Doha Ministerial Declaration reiterated this as follows:-

"The negotiations on trade in services shall be conducted with a view to promoting the economic growth of all trading partners and the development of developing and least-developed countries. We recognize the work already undertaken in the negotiations, initiated in January 2000 under Article XIX of the General Agreement on Trade in Services, and the large number of proposals submitted by Members on a wide range of sectors and several horizontal issues, as well as on movement of natural persons. We reaffirm the Guidelines and Procedures for the Negotiations adopted by the Council for Trade in Services on 28 March 2001 as the basis for continuing the negotiations, with a view to achieving the objectives of the General Agreement on Trade in Services, as stipulated in the Preamble, Article IV and Article XIX of that Agreement. Participants shall submit initial requests for specific commitments by... and initial offers by"

Source: Doha Declaration WT/MIN(01)/DEC/1, 20 November, 2001

GATS 2000 is currently at a request and offer negotiating stage. The Doha ministerial instructed that GATS 2000 should be part of a single undertaking due to finish by 2005. Having failed to progress substantially at the Cancún ministerial meeting, and as part of the July Framework Agreement negotiated in Gevena on 31 July 2004, a new deadline of <u>May 2005</u> was established for countries to table their revised offers.

⁴ Subject to any influence or pressure which may be applied or exerted, e.g. by other WTO members.

⁵ The use of terms like "disciplines" which carry value judgements tends to indicate that GATS is a normative framework, rather as other international frameworks relating to the water sector, such as human rights.

GATS and Water-related Services

As at the time of carrying out the research for this project (late 2004), only 34 out of 147 WTO Members have made commitments for their sewage and sanitation services under the GATS. For these sectors, they have not made any commitments for mode 1 (cross-border supply of water *services* is not technically feasible)⁶ and most commitments (with very few limitations attached) have been made for modes 2 and 3 (the latter possibly explaining the desire of some countries to 'flag' water as a sector for foreign direct investment. For mode 4, only Iceland, the US, Latvia, Morocco, Rwanda, Thailand and Turkey have made binding market access and / or national treatment commitments. So far, as regards water-related services, the GATS has effected little by way of actual liberalisation.

Under the GATS negotiating process, individual countries make requests and, based on these, offers. The request process is bilateral and Members submit requests in the form of a letter asking a country to add commitments for a service sector or to remove certain market access or national treatment limitations from a sector which has already been scheduled. Requests can also be used to ask a country to clarify the meaning of a limitation it has included in its schedule of commitments⁷.

Offers are used to respond to some or all of the requests made to a Member and take the form of a draft schedule of commitments. Offers are distributed to all WTO Members (not only those who have made requests) and subject to multilateral negotiation. Offers can generate more requests as part of the negotiation process, although not all countries may make requests or submit offers.

Requests and offers under GATS are usually not public, but initial requests of the EU to countries were made available (requests to the EU have also been made public, but not by country).

EU Position on Liberalisation of Water Services

Core to the EU's negotiating position is the reclassification of 'environmental services'. Under the proposed classification, 'water for human use and waste water management' become a new GATS sub-sector. As mentioned above, the EU initially, in 2002, requested that 72 countries make commitments to open up the 'water distribution' sub-sector in the current negotiating round (see Appendix 3). Some Members have incorporated environmental services commitments in their initial offers: Hong Kong; Korea; USA; New Zealand; Norway; Panama; Japan; Iceland; and, Switzerland. It is on the initial 2002 requests that this study has focused.

Subsequently, in *revised* requests in January 2005, the EC modified its approach. In comparison with the initial requests, the revised requests include a number of clarifications and a reduction of the scope of the requests, especially for LDCs. The revised requests place more focus on advisory (consulting) services where commitments are notably requested for cross-border supply. In the same vein, the requests under other environmental services are restricted to environmental impact assessment and environmental risk analysis, two key activities for

⁶ Although, of course, cross-border supply of water as an economic *good* is technically feasible.

⁷ One trade specialist has commented that "initial requests have tended to be comprehensive and aggressive as negotiators know that only a fraction of their demands may be met".

sustainable development. For infrastructure services (water and solid/hazardous waste) the request makes a clearer distinction between services supplied directly to business (notably industrial customers), where more ambitious commitments are sought, and the traditional public services (notably municipal services), where the request is more focussed. In particular, countries (or their local authorities) would keep the possibility (i) to apply exclusive rights (for instance through concessions); (ii) to choose freely the management arrangements for the service (for instance municipalities managing the service directly); (iii) to choose the mode of attribution of the exclusive rights (open competition or not); and, (iv) to change from one mode of management to another (for instance, at the end of a concession contract to return to a public or cooperative management mode). However, in cases where the authorities decide to award exclusive rights through a competitive procedure (call for tender), foreign operators would be granted national treatment in the bidding procedure (possibility to bid) and, if they are chosen, in the operation of the service. For Least Developed Countries, environmental services would be an optional sector to commit, within a group of 5 sectors (telecommunications, financial services, transport, construction, and environmental services).⁸

In contrast to the requests made to its trading partners, the EU's conditional *offer* (made on 29 April, 2003) under the GATS, included sanitation services, but excluded water for human consumption. In addition, the EU offer excluded 'public work functions owned or operated by municipalities, state or federal governments or contracted out by those governments.' (European Commission, 2003b). Similarly Canada, Switzerland and the US have all excluded drinking water services from their GATS offers. While Canada covers engineering services encompassing 'project management services for water supply and sanitation works, turnkey projects', it excludes sewage and sanitation services and makes no mention of potable water services. The US offer is more clear in that it 'excludes water for human use'.

The list of the 72 countries in the 2002 EU request is set out in **Annex 1**. It is a heterogeneous list including countries at very different stages of development. This raises a process issue which is discussed in section 7.

Mexico has not responded⁹ to the EU request with acceptance of the EU-proposed reclassification of environmental services to include water distribution services (Mexico indicates that it prefers an alternative classification - see further below, in section 8).

EU Water Initiative

The EU WI was launched at the World Summit on Sustainable Development WSSD in Johannesburg in September 2002. It has a "strong regional focus" (EC 2003) with "modules" in Africa, Eastern Europe, Caucasus and Central Asia, Asia, Mediterranean and Latin America. It aims to align existing EU spending on water-related development by concerted action of different parts of the European Commission.

The key goal of the EU WI is expressed to be the EU's commitment to the Millennium Development Goals (MDGs), particularly the targets on water supply and sanitation (WSS), supporting integrated water resources management (IWRM) and water efficiency planning. The WSS targets aim to reduce by half the proportion of people without sustainable access to safe drinking water by 2015 and halve by 2015 the proportion of people without access to basic sanitation (the latter was added by the World Summit on Sustainable Development-WSSD in

⁸ Abstract of the summary of the 2005 *revised* requests available from DF Trade's web site: http://trade-

info.cec.eu.int/doclib/cfm/doclib_section.cfm?sec=176&lev=2&order=date

As at the time of carrying out the research for this project. November 2004.

2002). The IWRM and efficiency target is as follows:- *Develop integrated water resources management and water-efficiency plans by 2005* (added by WSSD, Johannesburg in 2002).

In other words, as contemplated by the EU WI, a key goal, in the medium/long term, of the "development policies of the EU" is the provision of WSS services to populations in low and middle-income countries who do not have access to them, or who currently have inadequate such access.

But, whilst it is WSS services which are the focus of this research study, as will be seen from the Mexico case study, related issues of water resources management (WRM), also covered by the EU WI, are important (EC, 2003, page 22).

The origin of the EU WI was a EU Council resolution adopted in May 2002 endorsing the Commission "Communication on Water Management in Developing Countries" of March 2002¹⁰, which stressed the need to integrate sustainable water management in national and regional development strategies and to support partner countries in developing sustainable solutions, Such solutions would be sought, as alluded above, within the over-arching policy framework of IWRM, based on a river basin approach, which, combined with strong public participation, transparency and accountability, can, it was noted, play a critical role (e.g. particularly for sustainable development and conflict prevention in the case of transboundary waters).

The objectives of the EU WI are set out in **Box 2**.

Box 2.

EU Water Initiative: Objectives

Progress towards achieving the MDG poverty reduction targets, as embraced by the EU WI, is dependent on pursuit of the key objectives which the EU says are "universally recognised":-

- Reinforcement of political commitment towards action and innovation oriented partnership (i.e. raising the policy profile of water within national and regional agendas and particularly with governments);
- Promotion of improved <u>water governance</u>, capacity building and awareness (including political and sectoral reform as necessary);
- Improved efficiency and effectiveness of water management through multi-stakeholder dialogue and coordination;
- Strengthened co-operation through promoting river basin approaches in national and transboundary waters;
- Identification of <u>additional financial resources</u> and mechanisms to ensure sustainable financing.

Source EC (2003) emphasis added

At the EC-ODI 9th November meeting, it was pointed out that much of the attention of the EU WI will be towards the second objectives in Box 2., namely to supporting improved water

¹⁰ COM(2002)132 of 12 March 2002, 'Water Management in Developing Countries Policy And Priorities for EU Development Cooperation'. http://register.consilium.eu.int/pdf/fr/02/st08/08958f2.pdf

"governance". This is a broad concept which, it is noted above, may include "political and sectoral reform as necessary". Clearly one type of sectoral reform which may be made in the water sector *inter alia* is a switch from public to private provision of water services (or a combination of the two) and in relation to the third objective above (on multi-stakeholder dialogue and coordination), private sector involvement is mentioned in the general statement on the EU WI:-

'The evidence suggests that partnerships between public, private and civil society actors are the most adequate way to ensure improved efficiency and effectiveness of water management' as long as they are 'equitable, transparent, safeguard consumers' and investors' interests...'(European Commission, 2003, p. 22).

The EU WI development objectives, as above, are expressed in broad, conceptual terms only. By way of interpretation of those objectives, for the purposes of this study **the following are proposed as key components of the development objective** of "protecting water users' and consumers' interests", particularly improvement of water services benefitting poor populations in low and middle-income countries:-

- **connection**: extension of coverage of piped water networks to poor districts and households.
- **service**: improvement of the quality and regularity of supply of water to households, including poor households;
- **pricing:** whilst payment for water use is a key economic instrument in water management, pricing includes design and application of "social tariffs", i.e. tariff structures which allow differential pricing and include special treatment for poor households¹¹;

The focus of the above is social. However, another important aspect of water governance is of course environmental. Accordingly, water conservation issues are also considered below in relation to the Mexico City case study (in so far as they have a bearing on WSS objectives).

In terms of the governance¹² <u>modalities</u> deployed to ensure that such improvements in connections, service and pricing, are made for the benefit of poorer communities, key issues for the purpose of this research study are the type of (i) private sector participation (PSP); and (ii) regulation, including regulation of PSP.

Key Research Questions

A first key question for this study is to what extent free trade, and specifically GATS principles, are manifested in the manner in which private operators are permitted to participate, and participating, in the water sector: how much are water services open to a (free) market in PSP, and an international market in PSP?

¹¹ As a recent OECD study (OECD, 2003) shows, such social tariffs are operated in high/middle income countries of the OECD and there is a case for their design and development - over time - in low-income countries (the other option mode of providing support being social security type measures targeted at the user, instead of pricing of the resource). Tariffs may also be designed in pursuance of environmental goals (e.g. for reduction of levels of water consumption).

¹² "Governance" here used in its commonly accepted sense, to include both governmental and non-governmental entities and the interaction between the two.

A second key question¹³ is as follows: whether the regulatory "space" needed for government to secure their citizens' sustainable access to water services is constrained or enhanced by GATS principles. If pro-trade and pro-development objectives *are* to be compatible and convergent in relation to water services, it must be possible at a national level to liberalise the water services market according to GATS principles <u>and</u> to regulate according to the three development components above - on connection, service and pricing. The Mexico and other two case studies have been chosen for this research project because the markets for water services which currently exist in these countries offer opportunity for analysis.

Mapping Pro-trade "versus" Pro-development

Introduction of PSP involves modifying the role of public water authorities. The key role change is from provider of water services to overseer and regulator of water provision by private sector operators. However, the extent of PSP varies substantially, from service contracts with limited functions carried out by the private sector entities, to full privatisation where both operation and ownership of water infrastructure is passed from the public authorities to private operators. The range of different degrees of private involvement is represented (in outline) in the PSP box in Figure 2^{14} .

Figure 2.



The "Regulation" box in Figure 2 refers to the three components set out above - connection, service and pricing. As part of the mapping process, these components will be studied as "<u>observation points</u>" for the trade *versus* development interface: does the "impulse" of GATS principles (at present - and could it in the future) take effect to in some way curtail, for example, the setting of prices according to development objectives? i.e. operating on the "Regulation" box so as to effect the "Development Objectives" box.

It is reiterated that the aim of this study is <u>not</u> to carry out an in-depth study of whether or not PSP is successful in the water sector; that is an ongoing task of other empirical work, outside the scope of this study.

As regards, the fifth EU WI objective above, "Identification of additional financial resources and mechanisms to ensure sustainable financing", those additional resources may include private finance although as the EU WI notes "mainstream financial markets" "often...do not provide financing instruments to developing countries, or do so under unfavourable or even

¹³ As expounded in Mehta, 2004.

¹⁴ While, as Figure 2 indicates, the types of private sector participation range from service contracts to privatisation, it is not suggested that service contracts *automatically* lead to privatisation

prohibitive conditions¹⁵. So, "Official Development Assistance (ODA) has a clear role in unlocking this access" (EC, 2003, page 23). This issue of additional <u>financial resources</u> is an important one for provision of improved water access. One of the principal goals of opening the water sector to PSP, and particularly "international" PSP, has been to increase much needed capital investment in the sector. So this is another observation point for our study (as noted in the "PSP" box in Figure 2) - see discussion of this issue in sections 5 and 6^{16} .

EU policy, as recently expressed by the Commission, is as follows: "There is a need for a significant increase in funding for water and sanitation to achieve the MDG targets, as well as a need to develop better mechanisms to use development aid to leverage other resources (private, development banks, financial institutions, users' contributions, remittances, etc). The work done under both the Finance Working Group of the EU Water Initiative and by the World Panel on Financing Water (Camdessus Panel) in 2003 showed that the present level of funding is not sufficient. The EC stated that new innovative and flexible funding mechanisms are needed, and ODA should be used to leverage other resources to finance water and sanitation. The Camdessus Panel report 'Financing Water for All' stressed that "the flow of funds has to roughly double, with the increase to come from all sources" (Source: informal communication from DG Development)".

The Commission Communication of 2002 on Water Management in Developing Countries (COM(2002)132), approved by resolution of the European Council, called for partnerships between public, private and civil society actors to be promoted, ensuring that those partnerships remain equitable and transparent, allow free and reversible choices on water services management, safeguard consumers' and investors' interests and maintain high standards of environmental protection.

¹⁵ In many cases the countries where currently there is no involvement of international water companies, and there is, therefore, at present at least, no foreign trade *versus* development interface, may be at the same time the countries with the greatest gaps in WSS provision.

¹⁶ In section 5, under "Finance", the findings of the EU-sponsored "PRINWASS" project are referred to, as to the extent of capital investment actually brought under (a selection of) examples of PSP in developing countries.

2. EU-MEXICO RELATIONS: TRADE AND DEVELOPMENT

Alongside the multilateral rules system of the WTO, the EU and Mexico are linked by a system of association agreements which are bilateral.

The basis of the relationship is the "Economic Partnership, Political Coordination and Cooperation Agreement" (usually called the "Global Agreement") which entered into force on 1st October, 2000. It has three pillars: political dialogue, trade liberalisation and co-operation. It is run by a Joint Council at Ministerial level. The Global Agreement, among other things, gives the Joint Council the power to liberalise trade in services as well as in goods.

EU-Mexico Bilateral Trade Liberalisation

The Mexico-EU Free Trade Agreement (FTA) is comprehensive, covering goods, services, procurement, competition, intellectual property rights, investment and related payments.

Liberalisation of services was established by Decision 2/2001 of the Joint Council and entered into force on 1st March, 2001. On services, the main provisions of the Decision are that liberalisation will take place in two phases: from 1st March, 2001, a "standstill" clause will prevent both parties from introducing new discriminatory measures or reinforcing existing ones; within three years from that date (i.e. before 1 March, 2004), the parties will have to agree on a schedule for the elimination of all remaining discriminations between them over a maximum period of 10 years. In other words, according to the pro-trade perspective in the FTA, the horizontal trend (i.e. generally across all sectors) is for progressive liberalisation.

In the Joint Communiqué of the EU Troika-Mexico Summit, Guadalajara 29 May 2004, it was stated, paragraph 12 that: "Since entry into force of the Association Agreement, bilateral trade has increased by 39% and European investment in Mexico has grown by 15 billion dollars. Nevertheless, both parties stated that economic relations could and should increase further in the coming years, so as to reflect the real potential of the 25 members of the EU".

EU Support to Development in Mexico

Meanwhile, the EU Country Strategy for Mexico 2002-2006 states (page 22) that "...the implementation of the trade component of the Global Agreement is at the same time compatible and complementary with the aims of poverty reduction and support for economic growth". The purpose of this research study is, in effect, to consider, several years after the definition of this strategy, whether this compatibility/complementarity currently exists in the case of the water sector, in the context of the EU request for liberalisation of water services and the above Joint Communiqué - and also (to the extent indications are available) to assess how this situation may evolve in the future.

3. BACKGROUND TO MEXICO CITY CASE STUDY

Mexico City: Federal District

The focus of the Mexico case study is the "Federal District" (also referred to below by its acronym in Spanish, "D.F." for "*Distrito Federal*"). **Map 1.** below shows its location in Mexico and its position at the heart of the bigger "Mexico City Metropolitan Area" (MCMA).

Map 1.

The Mexico City Metropolitan Area



Source: Joint Academies Committee, (1995) (reprinted with the permission of the National Academy of Sciences, courtesy of the National Academies Press, Washington D.C.)

Mexico City is one of the largest cities in the world. The Federal District alone has a population of some 8.5 million people and the MCMA, which includes parts of adjoining states (such as the Estado de México - State of Mexico), has a population of c. 20 million. The population of D.F has nearly doubled in some four decades from 4.8 million in 1959 (Haggarty et al, 2001).

As shown on Map 1, the Federal District comprises sixteen political units called delegations (*delegaciones*) equivalent to municipalities. Each delegation is controlled by a local municipal head or *delegado*. Since 1997, like every other state and municipality in the republic, the D.F. also has a popularly elected mayor.

Water Service Provision in the Federal District

In 1993 the Federal District was divided into four "zones" for water purposes, when private sector contractors were engaged by the public authorities. PSP in water services has now, therefore, existed in the D.F. for more than a decade. Further, it has involved (and continues to involve) private sector consortia in which international water companies are participating, in each of the four zones - see **Box 3**.

Box 3.	The Federal District: the Zones and Private Water Operators				
Zone	Company	Consortium Partners	Delegations (in Federal District)		
A North	Servicios de Agua Potable (SAPSA)	 <i>Veolia Environnement</i> (formerly part of "Vivendi" group, France) ICA (Mexico, civil engineering); 	Gustavo A. Madero Azcapotzalco Cuauhtémoc		
B North- Central	Industrias del Agua de la Ciudad de Mexico (IACMEX)	 - Ondeo (part of Suez group, France) - Industrias Peñoles (mining, metals and chemicals, Mexico) and Socios Ambientales de México (Mexico) 	Venustiano Carranza Iztacalco Benito Juárez Coyoacán		
C South- East	Tecnología y Servicios de Agua (TECSA)	 Ondeo (part of Suez group, France) Industrias Peñoles (mining, metals and chemicals group, Mexico) 	Iztapalapa Milpa Alta Tlahuac Xochimilco		
D West	Agua de México (AMSA)	- Grupo Gutsa (Mexico); - <i>United Utilities</i> (UK)	Alvaro Obregón Cuajimalpa Miguel Hidalgo Tlalpan Magdalena Contreras		

Source: SACMEX

The Federal District provides a particularly pertinent case study because, in addition to the importance of D.F. as the capital city of the country, in each of the four zones, the international water companies participating are European-based and registered (see names in italics in Box 3).

The challenges of providing water services to a Federal District population which is large and heterogeneous in socio-economic terms are considerable¹⁷. The rates of piped connection in the Federal District are relatively high by low-middle income country standards - higher than in other parts of the MCMA, while the standard of service in D.F. is very variable, in terms of quality and regularity of water supplied through the piped connections. As set out below, however, it is the <u>pricing</u> regime in the Federal District which is the focus of this Mexico City case study, because of the nature of the information which has been available to ODI.

PSP has been introduced in the Federal District applying a <u>gradualist</u> approach, a phased process of contracting out of a limited set of services to private water companies. This contrasts with the experience in another Mexican city, *Aguascalientes*, where grant of a concession was made in the 1990s involving a much greater delegation of functions to the private sector utility - see comparisons below with this other example in Mexico.

Water Delivery to the Federal District

In addition to the challenges above, there are well-documented difficulties faced in managing the water resources of the Valley of Mexico, so as to make water available for distribution within the Federal District.

According to a recent World Bank study (Haggarty et al, 2001), "the availability of raw water resources to supply the D.F. is seriously curtailed by geographic factors. Mexico City is built on the floor of a drained lake - the site of the former Aztec city *Tenochtitlan* – high in a mountain valley. The city has a long and precarious hydrological history, combining severe water shortage with severe flooding. Both have been combated by heroic engineering projects to mine the aquifer underlying the city, to bring water from ever more distant river valleys which are one kilometer, in altitude, below the city, and to provide drainage away from the city for wastewater and floodwaters" (page 8).

The same report also noted: "Over-extraction of the aquifer had been recognized as a problem since at least the 1930s and the city had already committed to two very expensive projects, from the *Lerma* basin 60 kms away and the *Cutzamala* River 127 kms distant and some 1,200 metres in altitude below the city, for importing water from distant sources (page 22).

The Joint Academies Committee¹⁸ has studied the relation of the neighbouring basins to the Valley of Mexico and, as a summary of the water resources context of Mexico City, extracts from their authoritative report are cited below, alongside their map of the region reproduced below as **Map 2** (*reprinted with the permission of the National Academy of Sciences, courtesy of the National Academies Press, Washington D.C.*). The responsibility for managing the water resources in the Valley of Mexico and surrounding areas and bringing water to the "gates" of the city is borne by the public authorities¹⁹, i.e. water resources management (WRM) is in public hands.

As regards WSS, the set of responsibilities in the Federal District which has been delegated to the four groups of private contractors does <u>not</u> include managing the water distribution system amongst and within the delegations in D.F. The task of ensuring an available supply of water for households through the secondary network, including the management of that network, is also in public hands.

¹⁷ Whilst Mexico is not of course a low-income country, the country has great disparities of wealth.

¹⁸ Joint Academies Committee (1995), "Mexico City's Water Supply - Improving the Outlook for Sustainability", National Academy Press, Washington D.C. 1995.

¹⁹ Because the water resources come from surrounding areas beyond the Federal District, ultimately the responsibility falls on the Federal Government (of the whole republic), including a heavy share of the costs of maintaining and developing the long-distance sources for delivery of water.





"By the 1930s, continued subsidence and the realization that ground water supplies within the Basin of Mexico were being depleted had already prompted authorities to explore sources of water outside the basin. In 1941, construction began on a 15 kilometers long aqueduct to transfer water from wells in the *Lerma* Basin over the *Sierra de las Cruces* divide to Mexico City and the Basin of Mexico. In 1982, a more ambitious project was initiated that delivered surface water from the *Cutzamala* River Basin, a distance of 127 kilometers and a net rise in elevation of 1,200 meters. Currently, the Cutzamala-Lerma project is a combined system that delivers water from both the Cutzamala River and the Lerma Basin and contributes approximately 26 percent of the water supplied to the MCMA.

As shown in this map, the federal government had identified other sources of water from neighboring basins for their potential contribution to the water supply of the MCMA. According to the National Water Commission, the quantities of water potentially available from other neighboring basins add up to 43.7 cms, equal to the total extraction rate of the Mexico City Aquifer. The costs to import water from these areas are not known to the committee.

The Federal District service area includes nearly 11,000 kilometers of distribution lines and 243 storage tanks with a capacity of 1.5 million cubic meters. Water from all the separate sources is added to the common distribution system.

[Proposed plans] "to import 5 cms of water from the *Temascaltepec* Basin and 14.2 cms from the *Amacuzac* Basin [as recorded on the above map, have however not been pursued - it seems they are not considered viable]. [Similarly, the project to construct] a water transmission line (the *Acueducto Periférico*) [to transport] water from the Cutzamala System—entering the distribution system from the west—to the southern and eastern part of the district" [has not be carried out].

Source: Joint Academies Committee, (1995) (reprinted with the permission of the National Academy of Sciences, courtesy of the National Academies Press, Washington D.C.) [with annotations to reflect decisions subsequent to 1995] The comments of persons interviewed during this study reflected the link between WRM and WSS: several interviewees referred to the difficulties of bringing a sustained supply of water to Mexico City and the implications this has for water supply within the city - particularly, that *delegations* in the south-east zone - which is located furthest away from the Cutzamala water conveyance system - suffer from intermittent supply, and poor quality.

The key authority in relation to water in the Federal District is the *Sistema de Aguas de la Cuidad de México* – Water System of Mexico City ("SACMEX") which was created in January 2003, and is part of the Government of the Federal District, acting as "front-line" regulator.

4. "HISTORY" OF PSP IN WATER SERVICES IN MEXICO CITY

Liberalisation of the water sector in Mexico began during the term of President Salinas with reform of federal water policy in the late 1980s and a new water law in 1992 which promoted the notion of water as an economic good and endorsed the use of market mechanisms to manage water resources.

An overview of the reforms to the water sector to allow for the introduction of PSP, drawn from the EU-sponsored PRINWASS project (the Strategic Country Report Mexico²⁰), is presented in **Box 4.**

Under Mexican law, responsibility for provision of urban water supply has been passed to <u>municipalities</u>, although in practice substantial supervisory powers are exercised at State (in State Water Commissions) and Federal levels (in the National Water Commission – *Comisión Nacional del Agua or "CNA"*).

As to the reasons for introduction of PSP, the authors of the PRINWASS Mexico Report comment that the rationale was that the higher efficiency of a private sector provider would lead to replacing the existing culture of under pricing and non-payment by a commercially sound system based on charging for WSS and therefore collecting higher revenues, which in turn would increase the investment capacity needed to renew and expand infrastructure and achieve the system's sustainability.

It was also thought that by introducing PSP, WSS programmes would be less disrupted by one of the main weaknesses of public administration of water (and other) services in Mexico, namely lack of continuity caused by frequent changes in the composition of the technical and administrative boards at municipal level every three years.

²⁰ Torregrosa, M.L., Kloster K, (2004), Strategic Country Report Mexico for PRINWASS project, Latin American Faculty for Social Sciences (FLACSO), Mexico, August 2004 accessible on the PRINWASS website (<u>http://users.ox.ac.uk/~prinwass/</u>)

Box 4. Water Sector Reforms in Mexico

"During the 1980's ... important modifications were made in the institutional and legal structure to make PSP possible for water services ... Mexico's highly centralized administration of public services of potable water and sanitation, managed by the federal government, was decentralized and handed over to state and municipal governments, in order to allow PSP in the administration of services in the 1990's.

Up until 1982, the responsibility for management of urban and industrial water resources belonged to the Secretariat of Hydraulic Resources (SRH). In 1982, the SRH was replaced by the Secretariat of Urban and Ecological Development (SEDUE), which became responsible for regulation and management of water resources, mainly for urban and industrial use. Then, in 1989 the National Water Commission (CNA) was created as a decentralized organism of the Secretariat of Agriculture and Hydraulic Resources (SARH), and in 1994 water management became the responsibility of the Secretariat of Natural Resources and Fishing (SEMARNAP), in 2000 replaced by the Secretariat of Environment and Natural Resources (SEMARNAT).

Closely related to these institutional reforms in the field of water resources, changes were also made in legislation, first to introduce principles of economic rationality and later to facilitate the conditions for promoting private sector participation and creating water markets. In 1983, article 115 of the constitution was reformed, transferring the responsibility of water and sewerage system management from the federal government to the <u>municipalities</u>. This article established that supplying potable water, sewerage and wastewater services was the exclusive responsibility of the municipal governments. Then, in 1986 the Federal Law of Water Fees was reformed, introducing water abstraction fees and oriented at promoting higher efficiency in water uses. This law was reformed in 1990, when extraction fees were updated, and again in 1991 when fees for the discharge of polluted wastewater were established.

In 1992 a constitutional reform to article 27 created legal conditions for formally establishing land and water markets in Mexico. This same year, the National Water Law was passed, making private sector participation possible, creating institutions for management and consultation at basin level, and allowing user participation in the administration and operation of irrigation systems throughout the country. Finally, in 2004, with reforms to the National Water Law, the administrative management of basins was consolidated into newly created governmental bodies, the Basin Organisms. This law also gave the CNA the ability to grant integral or partial concessions for operation, conservation, maintenance, rehabilitation and extension of hydraulic infrastructure built by the Federal Government and the respective supply of services, as well as the responsibility for administering operations regulated by transfers of water rights, denominated "water banks". *Ejidatarios* and communal landowners were given the possibility to transfer both their land property titles and their water rights.

Along with transformations at the federal level, modifications also had to be made to the legislation of the provincial states".

Source: PRINWASS: Strategic Country Report Mexico, August 2004

First Round of PSP in the Federal District

The process of introduction of PSP in the Federal District, as planned in 1993, was to be carried out in three stages, as set out in **Box 5**.

Box 5. Planned Stages of First Phase of PSP in the Federal District

Stage 1: Initial Activities

- mapping of the secondary water distribution network
- completion of a customer census
- installation of meters for all customers

Objectives: to obtain reliable information on users and the state of the distribution and drainage network, and provide both operators and consumers with complete and reliable information on consumption levels.

Stage 2: Customer-Oriented Tasks

- regularization of billing (meter reading, maintenance and the sending of bills)
- shared role in collection of bills
- establishment of customer care centres and telephone care centres
- connect new customers

Objectives: to increase revenues, raise consumer consciousness about the careful use of water and the punctual payment of bills, and ensure billing of all customers.

Stage 3: Network-Oriented Tasks

- operation and maintenance of the secondary water and drainage networks
- detection and repair of visible and invisible leaks (water and drainage)
- rehabilitation and extension of the secondary network (water and drainage)

Objectives: to improve efficiency and quality of water distribution and drainage service to consumers, recover water previously lost through leaks, and reduce operating costs.

Source: Haggarty et al (2001)

Payment to the private contractors during Stages 1 and 2 above was to be on a fee-for-service basis, with, therefore, little commercial risk (assuming their capacity to achieve delivery of the services in question). The idea was that an element of performance-based remuneration be introduced by Stage 3. This would have entailed assumption of higher risk, and potentially greater reward.

In the event, the reality of PSP has been more limited. Although forecast to begin after approximately two years, the third stage did not begin as planned, and, after the election of a new Federal District government which took power in December 1997 (the first democratically elected D.F government), the original contracts were re-negotiated in 1998. Instead of the private contractors being given full control of operations and maintenance of the secondary network as originally envisaged, the new administration chose to use the contractors to supplement the work of existing organisations in improving the system, by making the contractors more active in leak repair and upgrading or repairing the secondary network, but on a fee-per-action basis. In other words, the intention of the original Stage 3 was not put into action. Whilst new actions have been added to the original plan, these do not substantially redistribute risk and reward between the public and private actors (the only exception seems to be the incentive element which has been added, as described below in section 8).

The choice of the Federal District authorities has been to engage the private sector in the carrying out of predominantly "commercial" functions, those listed under Stages 1 and 2, namely meter installation and reading, billing and collection, and customer management (through customer reception "agencies", six in each zone) with only limited involvement in works designed to renovate or extend water supply infrastructure. As of 2001, no orders for new connections, planned under stage 2, had been signed.

As well as being very partial in scope as far as WSS provision was concerned, the intention was <u>not</u> that the introduction of PSP should tackle the serious water resource problems facing the city, although the idea was to contribute to a reduction in consumption and waste (both physical and financial losses). Consistent with the original plan, the public authority has retained sole responsibility for WRM.

In the report of its 2001 study, the World Bank expresses the view (page 52) that the reforms were, furthermore, <u>not</u> specifically intended to improve the lot of the poorest of the city's citizens, but rather to generally increase efficiency in service provision.

As to the advantages of the gradual approach to introducing PSP, it could offer the possibility of building up confidence and trust in PSP, within public authorities, and between them and the private operators, and also among the general public, whilst allowing time for design of regulatory arrangements – thereby also avoiding the extent of social and political opposition often faced by more rapid and radical forms of PSP. Several of the interviewees comment that this gradual approach to contracting has proved appropriate in the Federal District of Mexico City, in that the relationships with the private contractors has been maintained through the different stages of the first ten years and into a new phase, avoiding the kind of upheaval seen in other places, e.g. Aguascalientes, where the concession which was granted by the city was subsequently suspended by the city and a major confrontation and conflict with the private operator ensued.

Second Round of PSP in the Federal District

As reported in the interviews with representatives of the public authority, SACMEX, and two of the private sector consortia (for the northern and south-eastern zones), a second round of PSP contracts has recently been signed in the Federal District. The first round contracts expired at the end of 2003/beginning of 2004 and since then new contracts have been placed with the same private sector operators (although, according to SACMEX, the configuration of the companies making up the groups which hold parts in the Mexican companies "fronting" as operators has, it seems, evolved).

SACMEX states that the new contracts²¹ are *sui generis*, in that they mix provisions found in service contracts with those more reminiscent of concessions, with incentives/risks combined. The companies acknowledge the addition of an incentive arrangement: where companies can

²¹ NB: The above information on the second round contracts has been gathered in exclusively oral form from the interviews; the contracts themselves are, it seems, treated as confidential and were not seen by ODI.

increase rates of bill collection increase (e.g. by pro-active calling of customers at their own cost), they will receive a percentage share of the increase.

The duration of these new contracts is for 5 years only (as compared with the first period of 10 years), which means that the contract will come under review again relatively soon - as one interviewee commented, after the next round of elections in the city and the country (it seems that, despite the introduction of PSP, the change of mandate of local elected representatives <u>is</u> still affecting the planning of water services).

The new contracts were placed without a competitive bidding process which seems to indicate overall satisfaction with performance of those operators during the first phase (the absence of a competitive market is considered below from a GATS perspective).

Decisions on price levels to be paid by water users in the Federal District are made by the public sector. Suggestions may be invited from the private operators, but the prices are not "theirs" to set; the proposing of the tariff structure is the responsibility of the regulatory authorities, as approved by the assembly of the Federal District.

In summary, under the PSP in the Federal District, at least under the two contractual rounds todate, only a small component of water services has been delegated to private service providers. Much remains under public sector management and control, including not only the primary challenge of bringing sufficient amounts of the water resource to the city, but also managing the secondary network, including making decisions as to which existing infrastructure is renovated or new infrastructure constructed (the contractors being only fee-paid executants of orders to implement such orders as/when they are made).

5. WATER SERVICES IN MEXICO CITY: TRADE VERSUS DEVELOPMENT

Water: social and political sensitivities

The water sector was recognised by both development and trade specialists interviewed in Mexico City as having an important social element, in that water services are of course a basic requirement of life for all human populations. Related to this, it was agreed that the water sector in Mexico is surrounded by considerable political sensibilities.

This was seen starkly during the economic crisis after 1994 when, due to the pressure of household finances, rising water prices came under close scrutiny. The 1990s also witnessed, in Mexico City, opposition to introduction of PSP on the basis that this would lead to privatisation of a <u>public</u> resource. Several of the persons interviewed in Mexico began their interviews with (for them at least) the starting point, namely that water is the property of the nation²², a "national good", as established by the Mexican constitution (Article 27).

If water services come under the GATS, this will cover most major ways in which water resources are used. According to Article XXVIII 'supply of a service' includes the production, distribution, marketing, sale and delivery of a service. One concern is the control of the resource. The European Commission maintains, 'requests are being made on environmental services, but do not touch on the issue of access to (water) resources.' While technically this is true, some commentators believe it is impossible that, once the market access is granted, the companies will not insist on access and even control on water resources. Collection is certain to include the water source, and could lead to establishment of control (if not 'ownership') of the water resources themselves. On that ground, the distinction between access to water delivery services and access to the resource itself may not be as easily demarcated as the EU's statement presumes.

The survey carried out by Soto Montes de Oca (2003), to assess the willingness to pay for water supplies in Mexico, included asking water users whether they would agree to pay private companies for managing the water supply service. The results of this survey "show that more than half of the respondents (56%) would not agree with the possibility of paying to private companies, almost a third (32%) would agree, and 11% do not know. Agreement to accept private participation is highly associated with income and education. As income and education level increases, respondents tend to agree more with the privatisation scheme. Overall, it can be observed that public confidence in the private sector is rather limited. Taken together this information shows that the public distrust both the government and private sector. However, still the majority would prefer to see the government undertaking a programme of this nature" (Soto Montes de Oca, 2003).

As to how the social and political sensitivity of water services manifests itself in attitudes to pricing of water services, this issue is discussed further below.

The participation in the first (and, as seen above, subsequent second) round of water service contracts of companies from outside Mexico added to the public-private debate a <u>foreign</u> element, which raised additional controversy - the fear that a national asset was going to be vulnerable under foreign influence and control.

²² Also, as reflected in Article 1 of the new national Water Law, passed in April 2004.

Limits on Foreign Capital Participation

The view was expressed by one interviewee that some sectors will remain entirely "Mexican", i.e. with no foreign participation²³. Under the <u>federal</u> "Foreign Investment Law"²⁴, water is <u>not</u> one of the sectors:-

- whose activities are "reserved to the State" under Article 5 (e.g. petroleum, hydrocarbons, petrochemicals, electricity, nuclear, postal service, coins and bank notes);
- whose activities are "reserved to Mexican companies" under Article 6 (e.g. domestic land transportation, radio, television other than cable);
- in which, under federal law at least (see further below), foreign investment is limited to a minority holding, under Article 7, whether 49%, 25% or 10% (e.g. insurance, domestic air transportation);
- in which foreign investment is allowed above 49% upon special permission being granted under Article 8, by the "investment commission" (e.g. legal services, drilling of petroleum and gas wells, international shipping etc.).

Under the Federal District regime, i.e. within the jurisdiction of the D.F. <u>below</u> federal level, there is a limit on participation of foreign companies in private water operators, of 49%.

This is clearly a PSP and trade restriction operating through the rules which apply to the water sector in the Federal District. Only registered Mexican companies are eligible to hold water service contracts in the D.F., and foreign/European participants are entitled to hold only minority shareholdings in those Mexican companies. It is significant that the limit is 49%, as compared with 50% which would establish a relationship of equal partners. The constitutions/statutes of those companies and any accompanying joint venture/partnership agreements (not seen by ODI) presumably define in detail the terms of this Mexican control and leadership (e.g. in relation to intellectual property rights).

The persons interviewed are aware of what this 49% limit means. Certainly, the Mexican trade negotiators, having consulted with their colleagues in the Ministry of the Environment (SEMARNAT) and the National Water Commission – *Comision Nacional del Agua* prior to the submission of the Mexican GATS offer, were aware of the limits on foreign investment in environmental services established at state or municipal levels, e.g. the 49% limit. <u>The Mexican offer was, accordingly, written specifically subject to such limits.</u>

An example was cited which had occurred under the North American Free Trade Treaty (NAFTA) whereby the "go-ahead" was given by federal authorities for siting by a foreign company of a solid waste processing plant which was subsequently blocked at municipal level, by refusal of the municipality, to grant the necessary licence, as provided for under local laws/regulations. This gave rise apparently to a breach of the country's commitments under NAFTA and a compensation claim against the Mexican (federal) government. Although, there

²³ The example was given of intra-urban transport services where the importance of knowledge of local conditions and circumstances and the availability of local capacity is thought, by one senior person consulted, to mean that outside help will not be required.

²⁴ As summarised and supplied to ODI by the Delegation of the EC in Mexico City.

are major differences between services trade provisions under NAFTA and the GATS²⁵, a similar scenario, it was noted, could arise in relation to water services if a future national position under GATS failed to take into account the rules applying for management of water services at the three different levels of government (federal, state and municipal). The GATS covers all types of domestic measures affecting trade in services from laws to administrative guidelines and actions. The obligations of the GATS apply – like those of the GATT – to <u>all</u> levels of government (central, regional and local) of each WTO Member.

It is also recognised by water companies that initially working in a joint venture has helped to introduce foreign water company executives to the local Mexican context, and allowed contacts and relationships to be established. But the preference, at least of the foreign companies, seems to be after an initial period, for an equal or even majority shareholding – i.e. in their view there are good reasons to expand both the scope of the water market in D.F. for which private companies can bid/apply and the foreign stake in those. It is considered below whether this current 49% restriction is likely to maintained or lifted in future.

Several interviewees expressed the view that the public-private issue was more sensitive than the Mexican–foreign one, although public fears were, it seems, expressed of profits from management of water services going abroad, to benefit foreign shareholders to the detriment of local/national interests. In practice, however, <u>both</u> issues are played down vis-a-vis the water user. As a tangible indication of the extent of sensitivity of water services, the customer care centres established since 1993 by the private contractors are presented to the public under the name of the public authorities and the companies' logos do not apparently appear on the vehicles which they deploy to carry out service functions.

Limited Delegation of Water-related Functions

As seen above, only a small part of the water functions in the Federal District has been delegated to private (Mexican-led) service providers, principally the "commercial" functions of mapping, metering and billing, with a limited role in terms of rehabilitation and construction of infrastructure - only upon order of the client and on a fee-paid basis. In other words, the private companies are in Mexico City acting almost entirely as agents (*a nombre de*) of the public authority. Much remains under public sector management and control and the extent of the regulatory space for government to secure their citizens' sustainable access to water services has been determined by the Mexican "domestic" regime (domestic in the sense of determined within Mexico, not by the GATS.

PSP has, nevertheless, represented a substantial change of roles for public authorities. SACMEX noted that the decade since the beginning of the first round of contracts with private sector operators has involved a learning process on both sides, for both public and private sector. The gradualist approach has, it seems, helped to make this learning process successful²⁶.

²⁵ NAFTA provides the right for investors to sue governments directly under the "ICSID" dispute settlement procedure and agree financial compensation as a result. This is not the case within the GATS which only provides for state-to-state dispute settlement. A Member may bring a complaint alleging that another Member has failed to carry out its obligations or specific commitments under the Agreement but as a mandatory first step in initiating dispute settlement proceedings, a complaining Member is required to consult in good faith with the defending Member.

²⁶ The mapping of the water distribution network and the client base, as well as installation of meters, is seen by a number of interviewees as having been successful, as well as the regularity of billing and creation of the customer care centres.

Connection

One of the key components noted in section 1 above, for protection of water users/consumers' interests, is rates of connection (extension of coverage of piped water networks to poor districts).

According to the 2002 census, the total number of individual houses in the Federal District is c. 2.1 million as compared with 1.82 million registered water users (as per the CADF, cited by SACMEX). The average rate of connection to the above houses is high, 97.88%, but the degree of connection is lower in the poorer delegations, such as the four delegations in the south-east zone (*Iztapalapa, Milpa Alta, Tlahuac, Xochimilco*) where the average connection rate is 93.57%. The reported rates of connection drop substantially when the parts of the MCMA outside the Federal District are also taken into account. Castro et al (2003) cite figures from the Comisión Nacional del Agua-CNA of c.86% of the MCMA having access to piped water and 72% to water sewerage services.

In other words, the rates of connection to the network in the Federal District are already relatively high, as compared with, for example, the significantly lower rates in the neighbouring State of Mexico into whose territory the more recent Mexico City sprawl has expanded. As regards extension of piped connections in the Federal District, to the extent the private operators have to-date renovated or constructed infrastructure (other than meters and other equipment for carrying out their commercial functions), this has been at the specific request/requirement of the public authority. This study did <u>not</u> yield information on action or plans to fill gaps in piped connection in the D.F..

Service

Another key component noted in section 1 above is service - improvement of the quality and regularity of supply of water to (poor) households.

According to SACMEX, the most challenging geographical area in the Federal District, in terms of service, due to the problems of delivery of bulk supply of consistence and of the right quality, is the delegation of *Iztapalapa*. Iztapalapa is the most densely populated area in the city, comprising some 20% of the population of the Federal District. The standard of service to the parts of the delegation which are furthest from the Cutzamala conveyance (referred to above) is, apparently, low with intermittent supply and problems of quality (the location vis-à-vis the Cutzamala conveyance being the explanation for that poor service which was given by both public authority and private service contractor).

A major factor, therefore, in determining the quality of service in the Federal District is seen to be the water resources context - the challenge of bringing bulk water supply to the Federal District and MCMA more widely. The responsibility for managing the primary, bulk supply of water to the Federal District/MCMA is in public hands and there is no suggestion (at least of which ODI is aware) to transfer this responsibility from the public to the private sector.

Social - Environmental Trade-Offs

It is important to note, that, not captured in the above figures are the settlements and people outside the formal system, dwellings which are not included in the official census and/or people not registered as users. As regards these informal settlements (of which there are many in the

Mexico City Metropolitan Area-MCMA, less now in the D.F.²⁷), the Ministry of Environment is adamant (Haggarty et al, 2001) that new "irregular" settlements should not be allowed to form on areas in the D.F. which are important for catchment of water resources, e.g. some of the hilly/mountain areas in the south of the Federal District (south-east). The key consideration here is considered here to be management of the resource and preservation of critical hydrological functions in the Valley of Mexico where, as noted above, the water resource is scarce.

Under the water law for the Federal District, the "Ley de Aguas del Distrito Federal" of May 2003, it is declared that "every person in the Federal District has the right to sufficient, secure and hygienic access to water for his/her personal and domestic use" (Article 5) and the "authorities will guarantee that right" (Art 5 again), but the scope of that article is made subject to "limits and restrictions". Article 6 specifically qualifies the principle that "water infrastructure and services should be accessible to all persons without discrimination, including vulnerable and marginal populations" with the proviso that this applies "always and when those populations comply with the legal rules on the use of the land where they are living or carrying out their economic activities". This is underlined by a later clause, Article 50 which states that "The water services for which the authorities are responsible cannot be provided to those persons who live in "irregular human settlements" (*asentamientos humanos irregulares*) especially it seems where this is "land for [water collection and] conservation". In the context of the Valley of Mexico, it seems, the environmental consideration is placed in priority above the development challenge of bringing water services to the unserved.

Pricing

The third key component of protection of water users' interests, as referred to above, is pricing. Again, the question is whether, in the Mexico City case, the regulatory space for defining pricing and tariffs is constrained (or enhanced) by GATS principles.

The design of "social tariffs", i.e. tariff structures which include differential pricing and provide for special treatment for poor households (e.g. applying cross-subsidies from wealthier areas) is an important tool for protection of water users/consumers' interests, as well as for protection of the environment through water conservation. As a recent OECD study notes (OECD 2003, page 70): "Where governments are unwilling or unable to offer financial relief to low-income households [i.e. through alternative measures of "income support"], tariff structuring is increasingly seen as a more promising approach to helping those who cannot met their most basic needs, while also reconciling environmental and affordability objectives. What is more, a growing number of examples of low-use and social tariffs are found in other utilities, notably telecommunications and energy."

The above OECD study looked at the methods by which OECD countries have sought to reconcile affordability and environmental objectives using *inter alia* tariff structures. Since both

²⁷ A recent study (Castro et al. 2002) points to "confusion in the regulatory framework, ie; different regulators for Mexico City [i.e. the Federal District] and the rest of Mexico [i.e. in the State of Mexico]. The study compared the status of WSS in two communities, one called Piru in the Gustavo A. Madero delegation, in the northern zone of the Federal District, occupied in the early 1980s and having very poor conditions in the beginning, but with paved roads and basic housing now emerging, the other called Huicholes, a poor, informal settlement in a municipality called Ojo de Agua located in the adjoining State of Mexico (i.e. whilst the latter is part of the sprawling Mexico City, it is not in the Federal District) with no water or legal electricity connections. It found that Piru, the wealthier community, is paying less than half for its household water than Huicholes. The lack of federal level, i.e. country-wide, standards is, the reports says, a "contributing factor to this injustice".

social equity and environmental scarcity are relevant issues in Mexico City, extracts from this OECD report are set out in **Annex 4** by way of background²⁸.

Interviewees in the Federal District reported that the <u>same</u> tariff is set for all four zones, with no price distinctions made as between different socio-economic levels of (domestic) customers receiving water supply, within or between delegations in the Federal District. The stated aim of the public authority is to establish "equity".

This means that, in the sense the tariff system does not differentiate between different (domestic) users of D.F., it does not apply a social tariff. The exception is that users whose service is of markedly lower quality are apparently granted a fixed rate, not a metered rate. These represent a minority and raises the issue as to whether the pricing of water services in the Federal District (and the outlying areas of the larger MCMA) is targeted to the poor. The aim of applying the above standard tariff is expressed to be equity, but more socially sensitive tariff structures are, in principle, capable of distinguishing between different water users to take into account their different financial circumstances. Article 6 of the Water Law for the Federal District (*Ley de Aguas del Distrito Federal*) does stipulate, in paragraph X, that "the authorities should adopt measures which include … a policy of pricing which is appropriate for marginal areas or low-grade housing (*vivienda popular*)". In pratice, this does not seem to be happening - or at least not yet.

However, as Soto Montes de Oca has pointed out, the price paid constitutes a substantial underpayment by <u>all</u> domestic users (as compared to the costs of providing the service²⁹), so to that extent the tariff is a "social" tariff. Even poor households in D.F., she suggests, may reasonably pay the low rate of c.100 pesos i.e. 10 dollars per month for their water³⁰. For well-off households this represents a <u>very</u> low level of payment. So, whilst the rate of payment has risen since the introduction of PSP, the price does not exploit the capacity of many high and middle income households to pay more for their water.

In fact, the major tariff distinction made in the Federal District is between domestic and nondomestic customers (the latter term encompassing industrial and commercial users, including the services sector). Haggarty at al. (page 36) compare the steadily rising prices paid for water by non-domestic users during the period 1996-98, as contrasted with the relatively lower rates charged to domestic customers. As regards domestic customers, the public authority in the Federal District (SACMEX) notes that water services embody a strong social element. It takes the view that the choice of what degree of private participation is introduced in water services (and at what pace) is particularly sensitive in relation to domestic users. Consequently, it treats its domestic customers differently, whereas "commercial and economic policies may be operated more freely in relation to non-domestic customers". So, in summary, therefore, in the Federal District there is a substantial cross-subsidy from non-domestic to domestic users, but not (currently at least) from rich to poor domestic users.

There has apparently been some initial discussion, eg, within elected members of the DF assembly who have a particular interest in water issues, about construction of a more developed

 ²⁸ Mexico is an OECD member, albeit one of a group of countries amongst the 30 members with most significant gaps in water services (OECD, 2003).
 ²⁹ This does not seem to be a new situation. As Haggarty et al, 2001 note, on page 22: "The price charged to the

²⁹ This does not seem to be a new situation. As Haggarty et al, 2001 note, on page 22: "The price charged to the D.F. for bulk water delivered to the city did not [prior to the introduction of PSP] reflect the investment costs, and the D.F. had a long history of not charging the opportunity cost for water extracted from the aquifer".

³⁰ Haggarty et al note (in 2001) that "at current tariffs, piped water is affordable but not always obtainable for the poor in D.F., leaving many customers to rely on more expensive sources".

social tariff, but it is considered unlikely that there would be changes before the elections in 2006. The generally low level of payment for domestic water has, it seems, been designed to avoid, or at least reduce, social and political opposition to water charges.

A subsequent survey by Soto Montes de Oca (2005, forthcoming) suggests that water officials and policy specialists may be more apprehensive of possible negative response to water tariff reforms including price increases, than the views of their customers merit, once they are informed. This survey looked at the willingness of households in the Federal District to accept water tariff reforms which would involve them paying more for their water services³¹, and compared the findings with the (then) perceptions of decision-makers in D.F as to the feasibility of introducing such reforms. The survey, first, confirmed the unequal and inequitable distribution of service deficiencies amongst the different areas of the Federal District³². Then it indicated that households in areas receiving relatively poor service (eg. in the south-east) expressed readiness to pay more for (genuine) improvement to their service, whilst customers in better served areas (eg. in the west) were, it seems, willing to pay increases to the (currently low) rates of charging, in order to be sure that their service would be *maintained* in the future. These responses were seen to reflect customers' recognition of the major challenges of ensuring future water supply to the large population of the Federal District - once they were informed of these challenges, as, in this case, explained to them by the researchers conducting the focus groups and interviews. A recommendation of the survey is for an information campaign to increase awareness among residents in the Federal District of the complexity of the water resource context and the magnitude of the ongoing supply problem for the D.F and wider MCMA.

Water's social and political sensibilities are also reflected in legal restrictions on disconnections: as the World Bank study in 2001 noted: "Although article 27 of the Mexican constitution of 1917 allows for the government to concession water rights to private persons, federal health legislation, passed in the 1930s, bans the complete disconnection of residential users for non-payment. In compliance with this law, the Federal District Financial Code apparently states that service can be reduced to minimum "vital levels", but cannot be completely severed (Haggarty at al, page 23). In practice, however, the World Bank reported that no residential customers had ever (at least in 2002) had their service reduced for non-payment in the Federal District.

In summary, key factors affecting the regulatory "space" in relation to water pricing are social and political sensitivities, including issues of equity between different areas of D.F, and the extent of awareness and recognition of the challenges (hydrological/environmental, and financial) of bringing water supply to all areas of the city. Judgements made by the public authorities in relation to the pace and direction of water pricing will presumably be based on a combination of these factors.

Water Conservation

There does operate in D.F. an increasing block tariff (IBT). IBTs set progressive bands for different levels of consumption, and can be used to encourage water conservation. Notes on IBTs from the OECD 2003 report are set out in Annex 4, including some advantages and

 ³¹ Soto Montes de Oca, (2005), "Qualitative considerations of consumers' willingness to pay for water tariff reforms in urban areas: the Mexico City case", forthcoming.
 ³² "From the survey we confirmed considerable regional variations where the wealthier west zone showed better

 $^{^{32}}$ "From the survey we confirmed considerable regional variations where the wealthier west zone showed better standards: 20% of respondents reported shortages, 47% low water pressure and about half poor water quality. In contrast, ... more households in the poorer east zone reported to be affected by frequent water shortages (52% of the respondents), low water pressure (72%) and poor water quality (61%)... Consumption of bottled water was reported by 61% of the respondents in the west and reached 91% in the poorer east zone (page 5)."

disadvantages. Soto Montes de Oca (2003) expresses the view that the current design of the blocks/bands in D.F. is not such as to actively promote water savings by the households which are consuming at the highest levels.

Finance

In the Federal District, PSP has not to-date involved the grant of concessions involving responsibility for managing the secondary network with the substantial levels of investment, and risk, which that would entail. The private consortia in D.F. have been required to bring, and brought, little capital investment for renovation and extension of the water supply service network.

Where the private sector has been invited to make such capital investment, e.g. in cities such as Aguascalientes in Mexico, the EU-sponsored PRINWASS project sheds doubt on the level of capital contribution actually brought by the private companies. The PRINWASS survey of PSP covers 17 cities in nine countries in Africa, Europe and Latin America³³ including both "mature" cases of 10-15 years of PSP, "intermediate" cases of 5-9 years of PSP and one "incipient" case of 1 year of PSP only. The research team noted "a consistent pattern" of very low or zero contributions of "fresh capital" from the private operator's own capital, with revenues constituting by far the major source of funding supplemented by loans - and state subsidies (page 47 & 48). Page 50: "The examples investigated by the PRINWASS team "tend to disprove the claim that PSP contributes to the financial relief of the public sector. The evidence suggests that … WSS utilities continue to rely on public funding whether through direct subsidies or other finance". This has meant that, page 45: "as a general trend capital formation has been far below then expected with a pattern of recurrent non-compliance of investment commitments according to contract...".

In Aguascalientes, PRINWASS reports (page 49) that after the revised concession contract was signed, due to the financial crisis, the financial burden of paying for infrastructure, particularly (page 49) "network expansion" was transferred back to the public sector. As the PRINWASS multi-country report ((<u>http://users.ox.ac.uk/~prinwass/</u>) states: "In Aguascalientes, Mexico, the private operator led by [a European water company] had to be rescued from bankruptcy by the public sector after the 1994 financial crisis [in Mexico as a whole], which involved an undisclosed amount in concept of state subsidy and the significant reduction of the private operator's financial responsibilities for investment in infrastructure."

This observation seems to be corroborated in Mexico by the indication that a response to the political and economic risk faced by water companies may be to treat their investments in Mexico (and perhaps other countries) as "project financings". The term "non-recourse" is also used to describe this project financing approach, whereby, once a local corporate vehicle has been established in the country in question by the foreign "parent" company (with such working capital as it necessary), the former is expected to make good of the contracts/concessions it is granted without recourse to the parent. The effect of this is that, although the creation of, or participation in, the local company may be accompanied by an initial injection of capital, thereafter there is no commitment by the foreign parent to invest. Just as the 49% as opposed to 50% limit, this is an important detail when the implications of working with foreign companies are being considered. In the absence of a parent company guarantee, the weight of the international company may only partially be brought into play. There is some evidence that experience during the first round of contracts in the 1990s, during the period of financial crisis

³³ Kenya, Tanzania; England, Greece, Finland; Argentina, Bolivia, Brazil, Mexico.

in Mexico, where the value of the Mexican peso plunged as against "hard" currencies, is not forgotten and that economic risk is in the minds of the international companies. This point is considered again in section 6 in relation to the rule on irreversibility.

Non-Competitive Bidding Process

It is noteworthy that the above 5 year renewed contracts were placed with the existing contractual incumbents without recourse to a competitive bidding process, i.e. the market was not re-opened so that other potential contractors might bid. It is not clear why a decision was taken not to put out the second round contracts to competitive tender (unlike the first). Perhaps this was due to a combination of reasons including the transaction cost, overall satisfaction with the performance of the existing service providers, reluctance to raise the public and media profile of water issues after the intense periods of attention devoted to them in the 1990s and the short duration of the renewals granted - possibly an expedient whereby the 2004 grants are in effect a holding position until after the holding of the major local and national elections in 2006.

What do the GATS principles say about this? Would they, if introduced, to the water sector, oblige regulatory authorities to use competitive bidding? The answer is that a country's commitment to the open market access principle under GATS would oblige the regulatory authority to use competitive bidding if a commitment for the sector had been made. To provide the concession to the incumbent could violate national treatment (if the firm is owned nationally, then foreign firms are being discriminated against) or the most-favoured nation principle (if the firm is foreign, firms from other countries are being discriminated against).

North-South Know-How Transfer

A further issue arose during the interviews which is of interest. It is recognised that the private consortia participating in water services in the Federal District have brought welcome knowhow and capacity in relation to the services which they have been contracted to perform to-date, as referred to above predominantly "commercial" services of customer census and mapping, metering, and billing and collection (and notably, high volume services).

One interviewee, however, cast doubt on the perennity of the know-how which the private companies from outside Mexico can bring. Since in the water sector that know-how is not "high-high-tech" (e.g. Airbus) it is only a matter of time, he suggested, before Mexican companies will have acquired the necessary expertise. If this analysis is correct, it may be that the 49% limit is designed to facilitate north-to-south know-how transfer in the short-medium (but not long) term.

The water companies themselves would very probably contest this notion, for example, on the basis that their skills had barely been demonstrated, due to their limited involvement in the Federal District to-date, as compared with the broader scope of responsibilities delegated to the companies under the concession, for example, in Aguascalientes.
6. OTHER GATS RULES

Subsidies³⁴

The question arises: how might GATS rules on "subsidies" enhance or constrain the regulatory space of public water authorities? how might water pricing subsidies - cross-subsidies built into water tariffs whereby one category of water user cross-subsidises another (e.g. poorer) water user - be "trade-distorting"?

A subsidy arises when a government or other public body confers a financial benefit on a specific producer or group of producers. Under the GATS, trade in services does not (at least currently) benefit from specific subsidy rules. Article XV of the GATS merely provides the right to consult in certain situations and a commitment to negotiate specific rules later. The Working Party on GATS Rules has found that direct subsidising of *exports* of services is not prevalent, though subsidised export credits for construction projects do occur. *Domestic* subsidies are, however, common (whether subsidy of capital cost, or cross-subsidy between users).

One of the allegations most often raised by critics of GATS concerns the presumption that it forces WTO member governments to grant domestic subsidies to all firms (including foreign) on a non-discriminatory basis. There are also concerns that in key social sectors, such as water, the GATS might constrain policymakers in providing water pricing subsidies. We have seen above that subsidies and social tariffs are important for the provision of water services to the poor in Mexico and other countries.

Under the GATS, however, trade in services is not yet subject to specific subsidy rules. The GATS has a number of Articles with only <u>indicative</u> content where further "disciplines" have yet to be developed. Although negotiations have in principle been started, on some areas only limited progress has so far been made in the context of the Doha Round. Subsidies is one such area.

Whilst the GATS does not yet define the term 'subsidy', the GATT definition defines one as arising when a government or other public body confers a financial benefit on a specific producer or group of producers.

The types of subsidies used by governments to support economic activities include direct payments or grants, tax concessions, concessional loans and government guarantees. Subsidies can be firm- or industry-specific or they may be economy-wide i.e. non-specific. The issue of subsidy practices in the services field is one where WTO members agreed at the end of the Uruguay Round to pursue negotiations with a view to developing multilateral disciplines. Article XV of the GATS merely provides a commitment to negotiate specific disciplines later.

Comprehensive data on the existence of subsidies in services trade is not available but the Working Party on GATS Rules has found that direct subsidizing of exports of services is not highly prevalent, although subsidised export credits for construction projects do occur and sectors such as transport, audio-visual, tourism and financial services typically benefit from some form of subsidy in both developed and developing countries.

It is unlikely that the development of any rules on subsidies under the GATS would constrain their use in the water sector to target provision at poor. First, within the GATS subsidies are considered as 'measures' for which most-favoured-nation obligations apply and national

³⁴ This information and guidance on subsidies in this section has been supplied by Ian Gillson of ODI.

treatment is applicable only the extent to which a GATS Member has listed a sector in its specific schedule of commitments. Most WTO Members have included limitations on national treatment that apply to all subsidies while others (Canada, EU, Japan and US) have done so with respect to specific modes of supply and specific services sectors. Second, guidance on the subsidies issue can be taken from the WTO's Agreement on Subsidies and Countervailing Measures (SCM). The WTO rules only concern *specific* subsidies since economy-wide subsidies (such as subsidises for poor consumers) are assumed not to distort trade. Subsidies are considered to be non-specific if eligibility is determined by objective criteria, not conditional on export performance or the use of domestic inputs, and not limited to a firm or industry within a geographic region. But subsidies that depend on export performance or the use of domestic over imported goods are prohibited, except for some developing countries.

The development of subsidy rules for services trade will be problematic, especially for export subsidies. For mode 1, the situation is comparable to trade in goods so the ban could be applicable. However for mode 2 the concept is confusing: a domestic producer would need to claim that a foreign supplier of services received government support conditional on attracting a consumer from the complaining country to consume the service abroad. Similarly, for mode 3 it is unlikely that a domestic government would provide a subsidy to a firm that is considering establishing a commercial presence in another country but it is possible that an importing country would try to attract investment from abroad (which would have trade and investment distorting effects). Finally, for mode 4 it is hard to imagine an example of export subsidies affecting the movement of natural persons. It is more likely that an importing country would provide subsidised travel or relocation grants to attract workers.

There are also complexities concerning the use of countervailing measures against subsidies in services trade. In order for measures to be taken against a subsidy, the SCM Agreement requires findings of injury to the domestic industry of an importing country. Determining injury caused by subsidies in services trade would be difficult for modes 2 and 4 because the traditional concept of 'imports' does not apply.

In summary, the kind of domestic subsidy, referred to above in the discussion on Federal District, and commonly applied in the water sector in social tariffs, is unlikely to be considered as "<u>trade</u>-distorting"³⁵.

Reversibility

Another GATS issue is how the rule on "irreversibility" may constrain (or enhance) the regulatory space of public water authorities?

Investors commonly plead for a climate of greater "certainty" to protect their interests. Under GATS, once governments have entered into commitments under GATS to open their markets in services (including water services), the rule under GATS is that they cannot withdraw from those commitments and if they do so, they are liable to pay <u>compensation</u> to a party who suffers loss as a consequence. A key question arises: once a government allows for private market

³⁵ Also among the currently most undeveloped elements of GATS is the obligation concerning domestic regulation in the GATS framework which aims at requiring Members to regulate those service sectors in which they have made commitments in a 'reasonable', 'objective' and 'impartial' manner. These terms are not clearly defined under Article VI of the GATS and much will depend on future discussions as to their meaning, and application. The reference also to 'necessary' disciplines has prompted considerable concern that WTO panels would interpret this as 'least-trade restrictive' (see separate ODI synthesis report, as well as Mehta 2005).

access, and particularly to foreign companies, is it permissible, under WTO rules, to reduce the degree of space accorded to PSP, *without* paying compensation?

For example, where a public water authority had, in one stage of placing contracts/concessions for PSP, delegated functions to the private sector which, in a *subsequent* stage of placing PSP contracts, that authority choses to return within the sphere of public responsibility, what would GATS principles "say"? Would this constitute a breach of the rule on irreversibility (or "lock-in" as it is also called)?

This is a fact situation which could arise in practice: if, for example, at the end of a 25 year concession, involving a *substantial* delegation of functions to the private sector, the public authority decided - for whatever reason - it wanted to go back to a contract with a *lesser* delegation of functions? In this situation, would a public authority be entitled to reduce, to return, functions delegated to PSP without paying compensation? Or, to put it the other way, under GATS rules, could the foreign company go to its government and ask for a complaint to the WTO. In answer to this question, purist advocates of a free trade approach might well wish to argue "Yes".

In practice, this question will presumably come down to whether "lock-in" will apply only for the *duration* of the term set in the contract/concession in question, and that, after expiry of the pre-determined number of years of the contract, the public authority would *not* (despite a GATS commitment) be locked-in, so that that public authority could change the extent of PSP, without paying compensation (as to the mid-term position, contracts will normally provide for where compensation or penalty payments are, or are not, payable).

The answer seems to be that, if a GATS commitment had been made in the water sector with <u>no</u> specific limitations stipulating that freedom to reduce/return was being retained, then compensation would need to be paid (if challenged). The rationale is that GATS is designed to provide some degree of certainty to private investors. However, if a limitation has been added to this effect, then the country would be free to reduce/return in that GATS only applies to sectors included in a country's schedule of commitments and even then limitations can be added. So, specifying limitation of this kind on GATS commitments, to allow for end of contract adjustment of the PSP status, will be an important issue for developing countries when deciding whether, and how, they should commit a sector to the market access and national treatment disciplines of the GATS.

That said, it is important to bear in mind that, in order to address (as they consider appropriate) this, and other, GATS issues, water officials and their colleagues in other government departments need of course to be aware of them: see the issue of <u>capacity</u> referred to in section 7.

If international water companies are to benefit (via their governments) from protection through the rule on reversibility, the protection afforded by this rule on irreversibility should presumably be reciprocal. It has been noted above that a response to the political and economic risk faced by water companies may be to treat their international investments as "project financings" whereby in the absence of a parent company guarantee, the weight of the international company is only partially be brought into play. The international investor signals that there is no certainty of future investment and from the outset avoids its own lock-in. In the context of the low levels of capital contributed by private companies, as observed by the EU PRINWASS project, this is a further consideration which may be taken into account by governments contemplating how to introduce and develop PSP.

7. PROCESS ISSUES

International: the List of 72 Countries in the 2002 EU Request

Developed countries, including the European Commission on behalf of the EU, need to be sensitive - and be seen to be sensitive - to the local context of the water sector in those developing countries, including the social and political environment, for which they ask to make commitments under the GATS.

In this connection, the sending out in 2002³⁶ by the EC and its Member States of requests to the 72 countries was unfortunate. The list was not only long, but also heterogeneous, including countries with very different levels of development and with sectoral concerns. It was perceived by observers outside the Commission as being a "blanket" approach to promoting GATS in relation to water services, indiscriminately ambitious and (worse, where it might be combined with conditionalities and/or other donor pressure, as aggressive) as well as not being sensitive to different country contexts.

From the 'internal' perspective of trade officials involved in administering GATS requests, a practical question arises: how do they decide which countries to make requests to, and which not? From the outside, the EU requests in 2002 look to have adopted a "mail-shot" approach (i.e. spreading requests widely), as opposed to another option which would have been to seek a more targeted approach. Whatever the internal reality³⁷, the fact is, as noted above, that the making of requests to 72 countries attracted substantial external attention including *inter alia* doubts as to whether it had taken into account the status of institutions (if any) for regulating private sector participation³⁸.

The EC states that it has, subsequent to the 2002 request, shown its willingness to discuss *transition periods* where developing countries have expressed the need for time to adapt their regulatory frameworks in light of GATS commitments, allowing for a more gradual opening of markets to foreign suppliers. In making its *revised* requests in 2005, the approach followed by the EC was that it allowed vulnerable countries (including all Least Developed Countries) to choose environmental services as an optional sector to commit out of a group of five sectors. In other words, the EC states that the level of development of countries is taken into account in the requests it makes to WTO member countries.

³⁶ As noted above, *revised* requests have since been sent out by the EC and its Member States, in January 2005.

³⁷ No information was available to this study on the processes internal to the Commission and to the discussions with/amongst Member States.

³⁸ The EU WI Code of Conduct, recently drawn up by a multi-stakeholder group and soon to be endorsed by the EUWI Steering Group, states clearly what it considers should be the role of the private sector: "The international public and private sector water operators have much to offer in the way of capacity building, knowledge transfer and management support to partner country water operators. However, the involvement of the private sector in the delivery of water and sanitation services is a National or Local Government choice and service provision should be undertaken in the most efficient and effective manner whether public, private or appropriate combination of the two options."

International: avoiding a conflict of interest

For developing countries where the capacity to negotiate GATS commitments is limited, and where the European Commission is advising trade ministries on types of market access, national treatment and regulation that it would consider acceptable as offers in response to its GATS requests, a risk of a possible conflict of interest arises. The nature of the conflict is that the same body, the EC, is providing technical assistance to assist a given developing country in order for that country to determine its position in the GATS negotiations whilst, at the same time, the EC is looking to further the EU's offensive trade interests in those negotiations.

In this context, the Commission recognises the desirability of making available technical assistance through third parties to support capacity building in relation to GATS where this is required. This is what DG Trade is doing, within the limits of its resources. It is clearly important that such disinterested methods should be used by the European Commission with the <u>impartiality</u> of that support being evident.

In-country

A key process point in-country, as revealed by the interviews in Mexico, concerns the pace and <u>sequencing</u> of introduction of PSP. This is addressed below in section 8.

8. SUMMARY OF MEXICO CASE STUDY CONCLUSIONS

So, in the case of Mexico City (and specifically the Federal District at its core), are the "protrade" and development objectives of EU policy in relation to the water sector consistent and coherent, or incompatible?

Current Trade *versus* **Development Interface**

As seen above, currently, in the Federal District, the scope of trade, and specifically international trade, in water services, is substantially circumscribed:-

- Mexico has³⁹ <u>not</u> to-date offered GATS commitments in relation to water services;
- non-Mexican companies are participating in the WSS regime in the Federal District, but that participation is limited to a minority holding of 49% maximum in Mexican companies;
- under Mexico's "domestic" (as distinguished from international) regime, PSP in the Federal District is (for all companies) confined to a limited list of "commercial" functions; in carrying out those activities, the private companies act (largely) as agents of the public authorities;
- most functions in relation to delivery of water supply and sanitation (WSS) remain the responsibility of the public authorities, including key decisions as to connection to the water supply network, service quality/regularity and pricing;
- the challenge of achieving sustainable management of water resources (bulk supply) for the Federal District (and the larger Mexico City Metropolitan Area) is also in public hands, and relies on substantial financial support at the national level;
- primary factors determining the setting of the Federal District regulatory framework are seen to be social and political (as well as issues of information and awareness), in the case of WSS, and hydrological/environmental in the case of WRM, i.e. GATS principles are not the operative factors in this respect.

Other factors have influenced the shape of PSP in Mexico, e.g. a key driver is domestic policy which was pro-liberalisation; in the water sector this manifested itself in the early 1990s by the major 1992 Water Law. At present, therefore, the regulatory space needed for the government of the Federal District to secure their citizens' access to water services is not constrained by GATS principles (because these do not apply) nor by trade principles (because their application is limited). The diagram which follows, in **Figure 3**, adds to the earlier Figure 2 by showing these **factors which are operative in the case of Federal District to circumscribe the operation of trade** (specifically GATS) principles. These are features of the Mexico domestic water regime, established and operated in accordance with the gradual approach to introduction of PSP in the capital city. So, due to exercise of choices made by the Mexican authorities, trade and development barely meet; as one interviewee expressed it in Spanish, at present the pro-trade and the pro-development domains "*no tocan*": do not touch; they are (largely) separate worlds, so that there is, in present circumstances, little or no interaction (whether compatibility or conflict) - at least under the current regime.

³⁹ As at the date of carrying out the interviews for this study, namely November 2004.

Figure 3: Factors in operation in Mexico City case



Possible Future Trade versus Development Interface

The discussion above describes the current situation. We should, however, also look to see how the situation may evolve (since the purpose of the EU request is to encourage opening of domestic water regimes). In the context of the GATS 2000 negotiations, the EU-Mexico FTA, and pronouncements under it such as the Joint Communiqué of the EU Troika-Mexico Summit, Guadalajara 29 May 2004, the question arises: **could there be, in relation to water services, more of pro-trade** *versus* **pro-development interaction in the future, and, if so, would this be characterised by compatibility and convergence, or conflict?** Will Mexico go towards more free trade in the water sector? Towards greater capital participation, so that foreign companies would be free to trade as equal 50/50% partners with their Mexican colleagues, or even as independent bidders in majority-owned companies?

The indication from this study is that the current position in the Federal District is not likely to change, at least in the foreseeable future (despite the EU request).

The mode of grant, in 2004, of the second round of contracts in the Federal District suggests maintenance of the status quo. As noted above, the rule limiting foreign companies' participation in the capital of the private water utilities operating in the capital has not changed in the second round: it remains at 49% and the companies continue to carry out predominantly commercial functions. It is true that the duration of these new contracts is short, 5 years only, so it would be open to a new government of the Federal District from 2006 to review this policy of control of access by foreign partners, but the public authorities in the Federal District have shown again themselves inclined towards this gradualist approach to PSP, and the Mexico offer (nationally) to GATS reflects this.

As to whether the private companies operating in the Federal District would be keen or not to assume more extensive service roles if they were offered them at some time in the future:-

- the new contracts contain for the first time an incentive arrangement whereby the operators will receive a percentage of increased revenues from water users, if they achieve increases (e.g. through, at their own cost, pro-actively contacting non-paying customers);
- future delegation to the companies (e.g. after the expiry of the current 5 year terms) of more responsibilities, e.g. in the form of concessions as opposed to service contracts, would present higher risks higher rewards (potentially);
- the view was expressed that in general terms it was preferable to be in control of all aspects of supply, so that, for example, in the event of complaints from customers relating to problems of intermittent or otherwise sub-standard water supply (e.g. in the south-east zone of the city), the companies could themselves act to deal with the problems, as opposed to being the recipients of the complaints where these arose;
- in the context of the water resources challenges in the Valley of Mexico, however, the above statement needs to be qualified: the problem-solving capacity of the manager of the secondary water supply network will surely remain subject to the ability of the public authorities to sustain "bulk" water supply (at least until any new water delivery systems are built);
- the companies' principal reservations seem to lie in relation to political/administrative risk; there is awareness of the risks inherent due to the relatively short mandates of elected leaders at municipal level, as well as the possible conflicts where elected representatives at the three levels of government are from different political parties; this is an issue which does not seem fundamentally to change despite the introduction of PSP.

Varying views were expressed on the future prospects for regulation generally in Mexico. One interviewee was sceptical as to likelihood of future, strong regulation in Mexico (and elsewhere in Latin America) and as to the regulators' ability, or motivation, to protect the smaller customer. For example, in the financial sector, the interviewee observed that there have been a "few big winners, and many small losers", with little in the way of credit facilities provided for SMEs. Fears exist of free trade policies and PSP in the water sector similarly favouring already richer and more powerful sections of Mexican society. Were these fears to be realised, the impacts of liberalisation would run contrary to the development objectives of the EU Water Initiative. As noted above, it is not the purpose of this study to judge the success or otherwise of PSP and the regulation which oversees and facilitates it. The test of that will come over time: subsequent study may assess how much the public water authorities and private water contractors have together been able to put into practice policies and practices for water supply connection, service-pricing which provide benefits for households including in poorer areas and circumstances.

It emerged from the interviews that Mexico has indicated that it prefers the classification of environmental services proposed by the Swiss as an alternative to that proposed by the EU. The Swiss have advocated the adoption of a legal interpretation of WTO rules stating that Multilateral Environmental Agreements (MEAs) and the WTO are equal bodies of law, that each should respect the competence of the other, and consequently, that MEAs, and not the WTO, should have primary competence to determine the legitimacy of the environmental objective pursued by national governments, and the proportionality, and necessity of, MEArelated trade measures.

The senior trade official who was interviewed made a comparison between the water and other sectors. Compared with the water sector where regulation is currently relatively weak, he noted that sectors such as financial services and telecommunications have much stronger systems of regulation (as an illustration, in a scale from 1 to 10, a value of 8 was attributed to the latter two). From the trade perspective, he recognised that, before a sector is opened up to private participation, including in particular "free" foreign participation, the system for regulation needs to be sufficiently defined and complete (*definido y completo*). Strengthening of the regulation of PSP in the water sector would then free the hand of trade negotiators such as himself and allow the country to enter into GATS commitments in relation to water services⁴⁰.

So, a first key lesson from the experience in Mexico is a **sequencing** one: that public authorities need to make sure adequate regulation is in place before opening up water services to PSP, including to foreign access. According to the study carried out by the EU-sponsored PRINWASS project, this lesson is borne out by a comparison of the experience of PSP in the Federal District with that in the Mexican city of Aguascalientes.

In other words, if, in the water sector, the two middle boxes in Figure 2, of "PSP" and "Regulation", were not adequately established in a particular country context, the effect would be for trade principles to impact directly on development, to, as-it-were, by-pass the middle boxes without "**checks and balances**" built into the system.

⁴⁰ There was inter-action between the Ministry of Economy and the Ministry of Environment (SEMARNAT) which is responsible for water in relation to the formulation of the GATS offer, i.e. in Mexico there was coordination between government departments in this regard.

What exactly those checks and balances should be will surely be best determined over time. The onus is on the committing country to provide for the limitations to the application of GATS rules that it wishes, in terms which are clear and effective for the development aims it is seeking to achieve, to formulate the "partial commitments" it desires. Assessing the question of what regulatory issues and problems might arise in the future if Mexico decides in principle to commit to GATS in relation to water services, is difficult, because, as has been seen, GATS is made up of a set of rules which are detailed and the context in which water services are provided in a given city/municipality is also dynamic. Further, the GATS rules are subject to uncertainties of interpretation, and in some cases their meanings are still being discussed and developed.

Venturing into the "what if" scenario of future GATS application, it has been seen above that in two particular types of fact situation, namely (i) competitive bidding and (ii) adjustment of PSP status (return of water service functions to the public sector, after a period of delegation to private companies), a decision to "open" water services to GATS could take effect to limit the decision-making scope of the regulatory authority - depending on how GATS rules are invoked and interpreted. These are two examples of areas where the Mexican and other authorities will presumably wish to satisfy themselves that regulatory space is not constrained, or not constrained beyond that which they consider acceptable. There may be others, but it is not here attempted to try to cover the possible range of "what if" scenarios.

The second key lesson relates to **capacity**. This study has served to confirm the complexity of the GATS-water relationship and the extent of dialogue and coordination between trade and water specialists required to "map" and analyse it. Water officials need to build up their understanding of the content of the different GATS rules, how they are interpreted internationally under World Trade Organisation (WTO) procedures/auspices, and especially how they may apply to water services. Trade officials meanwhile need to familiarise themselves with the special features of the water sector. In Mexico, it is widely recognised that "public good" aspects of water resources make the sector different from other service sectors, e.g. telecommunications and finance, and that the application of free trade principles and, potentially, GATS rules to the water sector is a sensitive social and political issue. **The fact that in Mexico (and other countries) choices over how local water services are provided has been passed to individual municipalities increases this capacity challenge:** whilst the domestic (i.e. in-country) logic of decentralising to municipal level may be clear, the effect in an international context is asymmetric in terms of capacity (the knowledge of GATS and understanding of regulation).

Water sector policy in Mexico is still evolving in line with processes of social and economic transformation. In this context it is surely preferable that the government retains flexibility to construct - gradually, over time - the checks and balances for regulation of private sector involvement which it considers appropriate, and to accumulate, also over time, the understanding of how to formulate its GATS offers with limitations listed to match those regulatory measures. In this manner, the public authorities in Mexico and other countries will be better equipped to achieve PSP which is effectively harnessed *towards* (as opposed to against) public objectives, including the aim of achieving improved and extended access to water supply for domestic needs in poorer areas.

ANNEX 1: LIST OF 72 COUNTRIES IN EU REQUEST (2002) REGARDING WATER SERVICES

The EU requested in 2002 that the following 72 WTO members commit their water sectors under GATS in the current round of services negotiations:-

1.	Antigua & Barbuda	37.	Malaysia
2.	Argentina	38.	Maldives
3.	Australia	39.	Mauritius
4.	Bahrain	40.	Mexico
5.	Bangladesh	41.	Mongolia
6.	Barbados	42.	Morocco
7.	Belize	43.	Mozambique
8.	Bolivia	44.	Namibia
9.	Botswana	45.	New Zealand
10.	Brazil	46.	Nicaragua
11.	Brunei Darussalam	47.	Nigeria
12.	Canada	48.	Oman
13.	Chile	49.	Pakistan
14.	China	50.	Panama
15.	Colombia	51.	Paraguay
16.	Costa Rica	52.	Peru
17.	Cuba	53.	Philippines
18.	Dominican Republic	54.	Qatar
19.	Ecuador	55.	Senegal
20.	Egypt	56.	Singapore
21.	El Salvador	57.	South Africa
22.	Guatemala	58.	Sri Lanka
23.	Honduras	59.	St Kitts & Nevis
24.	Hong Kong, China	60.	St Lucia
25.	India	61.	St Vincent & Grenadines
26.	Indonesia	62.	Switzerland
27.	Israel	63.	Taiwan
28.	Jamaica	64.	Tanzania
29.	Japan	65.	Thailand
30.	Jordan	66.	Trinidad & Tobago
31.	Kenya	67.	Tunisia
32.	Korea	68.	United Arab Emirates
33.	Kuwait	69.	United States of America
34.	Lesotho	70.	Uruguay
35.	Macao, China	71.	Venezuela
36.	Madagascar	72.	Zimbabwe

ANNEX 2: MEXICO CASE STUDY: LIST OF PERSONS CONSULTED

José F. Poblano			
Director General of Negotiations on Services,			
Ministry of Economy			
Germán Martínez Santoyo			
Executive Coordinator of Services to Water Users			
Sistema de Aguas de la Ciudad de México (SACMEX),			
Government of Federal District			
Dr. Cassio Luiselli Fernández,			
Vice-President of SEMARNAT (Ministry of Environment and Natural Resources of			
which the Comisión Nacional del Agua is part) until recently			
now Head of International Studies at the Instituto Tecnológico de Monterrey			
Gloria Guerra Guerrero,			
Sub-Director of Citizen Relations			
Sistema de Aguas de la Cuidad de México (SACMEX), Government of Federal District			
Remi Usquin			
Director of Water Division			
Consorcio Internacional de Medio Ambiente, S.A. de C.V. (CIMA)			
(Mexican joint venture company, including Veolia, formerly Vivendi)			
Ramón Vila			
Director General			
Tecnología del Agua, S.A (TECSA)			
(Mexican joint venture company, including Ondeo, part of Suez			
Joost Martens and Manuel Perez-Rocha Loyo			
Regional Manager and Mexico Advocacy Officer			
OXFAM			
Dr. José Esteban Castro			
St. Antony's College, Oxford			
International Coordinator of PRINWASS Project (funded by EU Research)			
Dr. María Luisa Torregrosa Armentia,			
Latin American Faculty of Social Sciences-FLASCO, Mexico City			
Co-author of Mexico Country Study for PRINWASS Project (funded by EU Research)			
Gloria Soto Montes de Oca			
School of Environmental Sciences, University of East Anglia,			
Norwich, UK			
Philipp Dupuis,			
First Secretary, Economic and Commercial Affairs			
Rafaella Silvetti, Commercial Adviser			
Delegation of the European Commission.			

ANNEX 3: EXTRACTS FROM PRINWASS STUDY ON AGUASCALIENTES

Source: PRINWASS: Strategic Country Report Mexico, August 2004

The city of Aguascalientes is located in the central northern region of Mexico and has experienced important economic and population growth in the last decade. One example of this is that its population grew from 450,000 in 1990 to 600,000 in 2000 and the trend indicates that by 2010 there will be almost one million residents. At the same time, Aguascalientes has always been characterized by its location in a zone of water scarcity. The aquifer that supports its growth is being over-exploited ... This situation, added to the growing demographic pressure on services, as well as the growing debt of the municipal government, prompted the government to consider introducing PSP.

In 1993 the State Water Law was reformed to allow the transfer of responsibility for water and sanitation services to state governments and also provided for the disconnection of water services for non-payment. This was followed by the new state Law for Potable Water, Drainage and Sanitation Systems, which created the conditions for the introduction of PSP in Aguascalientes. In the same year, Decree 32 was signed, authorizing the municipal president of Aguascalientes to grant a concession of the public services of potable water, sewerage, wastewater treatment and reuse. The municipal president granted the <u>concession</u> to a private consortium the following day. The above state Law for was reformed in 2000 to allow for the establishment of monitoring bodies such as the Institute of Water (INAGUA), the Citizen Movement for Water, and the State Consultative Council on Water, among others. Finally, in 2002, the State Water Law was modified, cancelling the policy of disconnection for non-payment established in 1993; the reform also established that the state congress would approve all changes in tariffs for water services. However, after the state congress authorized these reforms, with the agreement of almost all political parties, the governor vetoed them.

The process of decentralization of WSS was carried out in conjunction with a series of administrative, policy, and legal reforms ... for introducing PSP. However, the overall process and, especially, the concession of the water utility to a private operator, was punctuated by all sorts of contradictions and institutional weaknesses. In particular, the concession was granted <u>in the absence of any regulatory mechanisms or legal framework to monitor the performance of the private operator</u>. Also, in political terms the whole process had very weak foundations, given that the country's political reform was still very incipient, which at the state level was reflected in the absence of a meaningful political representation in congress that could offer an effective counterbalance to the single ruling party. After the decentralization and transfer of the administration of water services, the municipal government was weak politically, administratively (e.g. understaffed, lacking skilled workers, inexperienced in management), and financially (burdened by debt and under-resourced), since it had been historically dependent on the central power. Civil society was not involved in the process either, since their historical relationship with the government had been characterized by traditional clientelism and political patronage.

In perspective ... the introduction of PSP in WSS in Aguascalientes was a candidate for failure from the start. The company faced a complicated situation with the citizen reaction to raising tariffs. Fees were raised from an average cost of \$.50 pesos (US\$.04) in 1989, to \$5.96 pesos (US\$.52) in 2001. The economic crisis of 1994-95 intensified the financial problems confronted by the company, doubling debt acquired in dollars. Meanwhile, the politicization around raising tariffs and water suspensions reduced the commercial efficiency of the company during the economic crisis, later renegotiating the contract under very different conditions. These modifications improved the position of the company, since the federal government took on most of the debt, the contract was extended ten years more than what was initially agreed, and the company no longer had to invest in infrastructure with its own resources. It could now build infrastructure funded with state or mixed resources.

ANNEX 4: DESIGN OF WATER TARIFFS: EXTRACTS AND NOTES FROM OECD STUDY (OECD, 2003)

In this review of systems of water pricing in the countries of the OECD, it is noted that: "Household water tariffs typically have a flat-fee component or fixed ("service") charge, plus either a single volumetric rate or a series of blocks or block rates (generally increasing, but sometimes decreasing in North America) from which the volumetric charge is calculated. If there is no metering, the fixed charge is often related to some consumer characteristic(s) – e.g. property value, lot size, or water appliance inventory. A minimum charge, whereby a certain volume or water is paid for in each billing period whether or not it has been consumed, is occasionally used, although it has clear economic and environmental disadvantages. Charges for sewerage and sewage treatment services are either a fixed fee or are based on the measured quantities of water supplied, with efficiency arguments again favouring the latter".

Social Tariffs

"Special or "social" tariffs are designed for designated groups of water users such as poor households. This may include fixing tariff levels so that a cross-subsidy operates in favour of low-income households from the rest of the household sector, or applying arrangements for "capping" metered tariffs for low-income customers".

Five examples in the OECD are described (in this OECD 2003 publication) of special or "restricted" tariffs, e.g. for those receiving social benefits or for retired people, so that there is cross-subsidisation between water users (e.g. Anglian Water in England, the "social assistance" tariff in Malta, the special terms for retired customers in Murcia, Spain).

Income Support Measures

"The alternative approach is measures which may be described as "income support" measures which address the individual water customer's ability to pay from the income side, by e.g. direct income assistance or water service vouchers, payment assistance (payments plans, arrears forgiveness), special tariff rebates and discount, and other hardship measures".

Increasing Block Tariffs

"In the "traditional" IBT (increasing block tariff), the marginal price of a unit (usually a cubic metre) of water in a given billing period increases as consumption rises, usually in steps (hence the notion of a "block") until a final, open-ended block is reached. Where the IBT structure encompasses all sectors (household, commercial, industrial), only larger users will reach the higher blocks. There may be a separate fixed "service charge", and a minimum charge for a certain amount of water per billing period is sometimes imposed, irrespective of actual consumption (the latter are best avoided, since they will cloud scarcity and environmental signals and also frequently undermine equity). By presenting a scale of rising prices linked to rising consumption, an IBT can convey to consumers a scarcity scenario, providing a consumption disincentive (Page 79). The IBT is commonplace for the household sector throughout the OECD Mediterranean countries (Greece, Italy, Portugal, Spain and Turkey) and is also found in Japan and South Korea (page 80)."

"It is noted that a first low-price block that is identical for each household does not address the needs of different households. Such an arrangement will tend to favour small househoulds and penalise larger ones. A few utilities have been receptive to arguments in favour of a fairer system related in some manner to the number of persons in the household."

ANNEX 5: LIST OF REFERENCES

Castro L., Cruz, S. and Green J. (2003), "The Changing Environment of Water Services Provision in Mexico: new rules, new roles: does PSP benefit the poor?", WaterAid and Tearfund 2003

European Commission (2003), "Water for Life - EU Water Initiative: International Cooperation - from knowledge to action", Brussels 2003

Estados Unidos Mexicanos: Ley de Aguas Nacionales 1992 and 2004

Haggarty, L., Brook, P, Zuluaga A.M., (2001), "Thirst for Reform? Private Sector Participation in Providing Mexico City's Water Supply", Policy Research Working Paper 2654, World Bank Development Research Group, Regulation & Competition Policy, Washington D.C., August 2001

Joint Academies Committee, (1995), "Mexico City's Water Supply - Improving the Outlook for Sustainability", National Academy Press, Washington D.C. 1995

Ley de Aguas del Distrito Federal, water law for the Federal District, May 2003

ODI (2004), "Right to Water: Legal Forms, Political Channels", Briefing Paper, Overseas Development Institute, July 2004, <u>www.odi.org.uk/wpp</u>

OECD (2003), "Social Issues in the Provision and Pricing of Water Services", OECD Paris, 2003

Metha, L. and B. la Cour Madsen (2004), 'Is the WTO after your water? The General Agreement on Trade in Services (GATS) and poor people's right to water'.

Newborne, P.,:-

- (2003), "Increased Access and Differentiated Water Services in Selected OECD Regions", "Social Issues in the Provision and Pricing of Water Services", OECD Paris, July 2003

- (2004), "Water and Poverty Reduction", report of review of water resources management and water supply & sanitation under PRSPs and equivalent development strategies in ten countries (including Mexico) for by WWF *Living Waters*, <u>www.odi.org.uk/rpeg/wpp/wpppublications</u>

SACMEX (2004), "Economía Social del Agua en el Distrito Federal", presentation supplied by Gloria Guerra Guerrero, Sub-Director of Citizen Relations, Sistema de Aguas de la Cuidad de México,

Soto Montes de Oca:-

- (2003) "Assessing the willingness to pay for water supplies in Mexico City: Consumers and decision-makes' perspectives", PhD thesis, School of Environmental Sciences, University of East Anglia, Norwich, UK

- (2005), "Qualitative considerations of consumers' willingness to pay for water tariff reforms in urban areas: the Mexico City case", (forthcoming)

Soto Montes de Oca, G. Bateman, I, Tinch R, Moffat P, (2003), "Assessing the Willingness to Pay for Maintained and Improved Water Supplies in Mexico City", CSERGE Working Paper ECM 03-11, Centre for Social & Economic Research on the Global Environment, University of East Anglia

Torregrosa, M. L., F. Saavedra, E. Padilla, A. Quiñones, K. Kloster, G. Cosío, and Ch. Lenin (2003), Aguascalientes Mexico Case Study, in J. E. Castro (Coord.), Barriers to and conditions for the involvement of private capital and enterprise in water supply and sanitation in Latin America and Africa: seeking economic, social, and environmental sustainability (<u>PRINWASS</u>), European Commission - 5th Framework Programme (INCO-DEV), Contract: PL ICA4-2001-10041, Oxford, University of Oxford - School of Geography and the Environment (<u>http://users.ox.ac.uk/~prinwass/</u>).