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SERVICES 2000:

Canadian Services Industries and the GATS 2000 Negotiation

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THE CANADIAN ENVIRONMENTAL SERVICE SECTOR

*A Consultation Paper
in preparation for World Trade Organization (WTO)
General Agreement on Trade in Services (GATS) Negotiations*

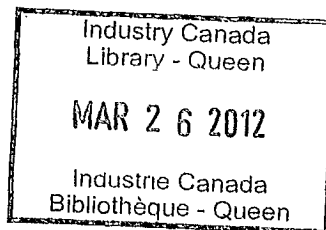
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Prepared by the International Investment and Services Directorate
Industry Canada

October 15, 1999

Electronic copies of this document are available on the Internet at the following address:
<http://services2000.ic.gc.ca>

To obtain additional information about this publication, please contact:
International Investment and Services Directorate
Industry Canada
235 Queen St.
Ottawa, Ontario
(613) 954-2354

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I. INTRODUCTION

One of the key accomplishments of the last round of the Multilateral Trade Negotiations was the negotiation of the General Agreement on Trade in Services (GATS). This negotiation resulted in improved rules for governing international trade in services. While much was accomplished during this first round of negotiations on trade in services, there remains room for improvement, for expanding coverage of commitments, and for eliminating trade restrictions. A new round of negotiations, scheduled to begin no later than January 2000, will seek to expand the existing commitments in trade in services.

Promoting trade liberalisation continues to be an objective of the Canadian federal government. Strengthening and expanding the GATS is key to capitalizing on trade opportunities, increasing exports from our service sectors, and creating jobs and growth for all Canadians. Increased access to international trade and investment opportunities for the service industries results, not only, in job creation for the service sectors, but also the creation of opportunities for all businesses.

The GATS is not just a treaty that exists between governments; it is first and foremost an instrument for the benefit of business in general. Specifically, it increases opportunities for services companies wishing to export services or to invest and operate abroad. The Canadian government believes that further liberalization under the GATS will benefit Canadian industry and individuals alike. Active involvement of the private sector is important to ensure successful negotiations and business involvement ensures that policy reflects the real export and economic interests of the Canadian service industries.



*"Active service industries
involvement in the
negotiations
is crucial to target Canadian
negotiating objectives
towards
the priorities of business"*

Over the coming months, Canada will be consulting closely with service providers, provincial governments and other interested parties to define Canadian objectives for the next round of GATS negotiations. The messages heard during these consultations will shape Canadian negotiation strategy, specifically what we want or need from other countries and what we are willing to concede in order to achieve our objectives.

This document represents the first step in a consultation process aimed at determining the negotiating position of the Canadian *Environmental Services* sector. In the current WTO schedules, the environmental services sector is defined to include: sewage services, refuse disposal services, sanitation and similar services, and other environmental services (i.e. cleaning of exhaust gases, noise abatement services, nature and landscape protection services and other environmental protection services not included elsewhere). Several countries have been advocating the use of a broader definition based on the

OECD/Eurostat work referred to later in this document. Therefore, this paper attempts to examine environmental services in a broader sense.

References to WTO commitments, however, are confined to the original narrow definition of environmental services used by Members in scheduling their commitments. This document does not examine commitments made in service sectors which are related to environmental protection or prevention such as construction or engineering. The reader is invited to refer to the engineer, architecture or construction consultation papers for an overview of these sectors that overlap with, or are complementary to, the environmental services sector. These documents can be obtained on our web site at <http://services2000.ic.gc.ca> or by calling us directly.

It is our hope that the following analysis will provide valuable information while soliciting the views of industry members. Within this document you will find:

- ▶ A brief review of the General Agreement on Trade in Services (GATS);
- ▶ An overview of the service industries within a global and domestic context;
- ▶ An analysis of the environmental services sector globally and in Canada;
- ▶ A discussion of the changing international and domestic regulatory and trade environments;
- ▶ An analysis of current GATS commitments related to environmental services; and
- ▶ Initial Canadian objectives for GATS 2000.

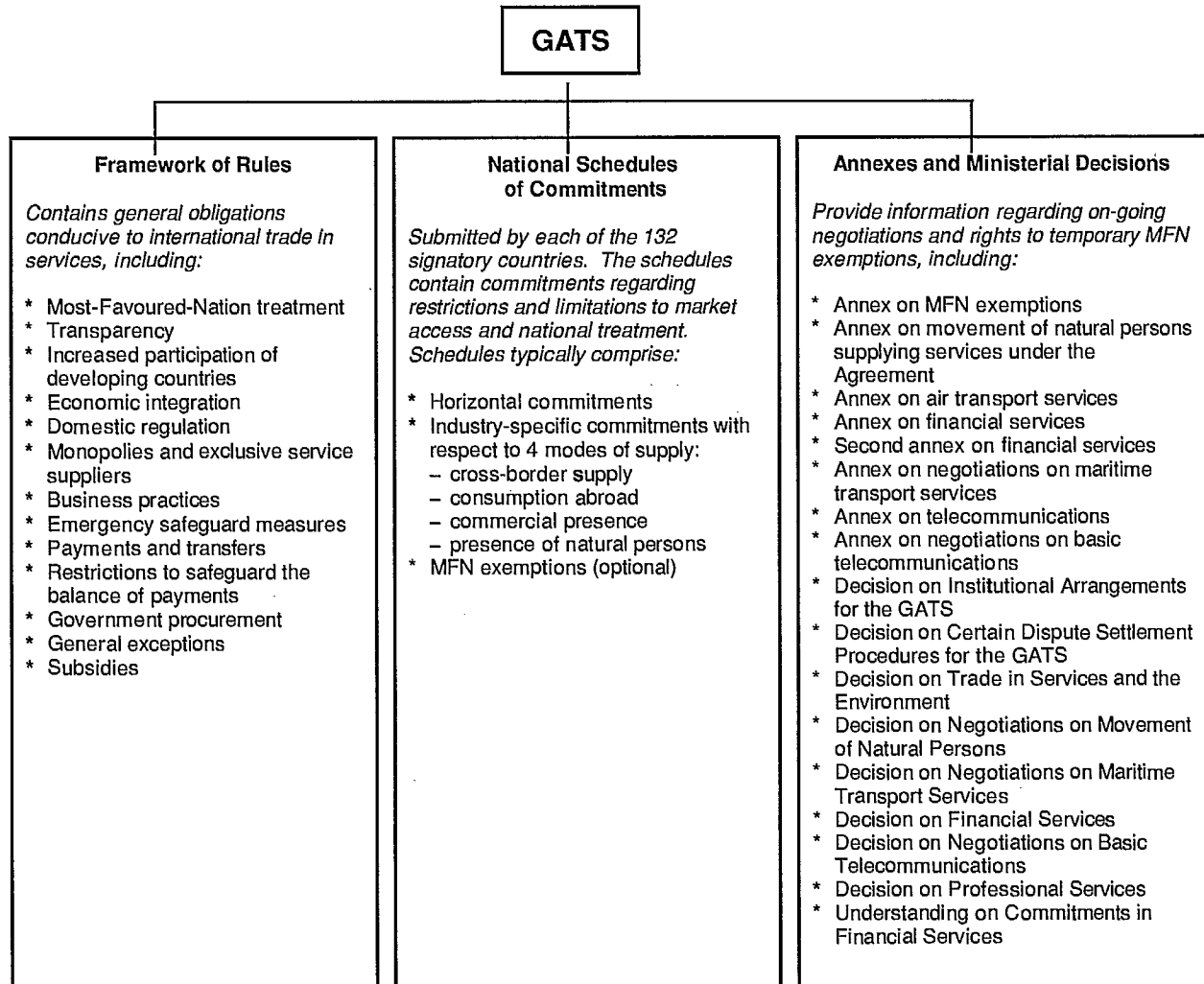
II. REVIEW OF THE GENERAL AGREEMENT ON TRADE IN SERVICES (GATS)

What is the GATS?

The General Agreement on Trade in Services (GATS), negotiated during the Uruguay round of multilateral negotiations, is a multilateral, comprehensive framework of rules governing trade in services. It applies to all service sectors and all forms of trade in services, including investment. It comprises three parts:

- 1) the general framework of rules and obligations;
- 2) individual schedules of commitments for each WTO Member, which specify, on a sector-by-sector basis, the conditions under which foreigners may supply services; and
- 3) annexes and ministerial declarations.

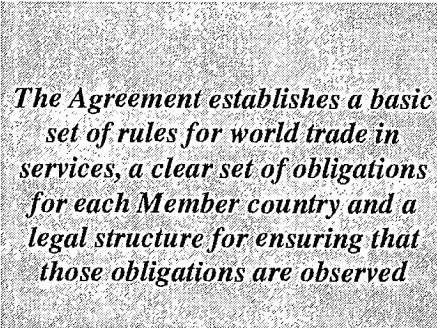
Figure 1: Components of the General Agreement on Trade in Services (GATS)



The multilateral trading system, under which the GATS was negotiated, has existed for fifty years. Among the outcomes of the latest round of negotiations was the establishment of the World Trade Organisation (WTO). This organisation is now responsible for overseeing the implementation of the various multilateral trade agreements and their dispute settlement mechanisms. The next round of GATS negotiations, GATS 2000, will take place under the auspices of the WTO.

While it is true that almost 50% of Canada's trade in services is made by the 100 largest companies in the service sectors, small and medium service firms are more likely to be engaged in exports than their goods producing counterparts.

While the GATS is a government-to-government agreement, it is of direct relevance to firms because it lays down the framework of international rules within which firms operate around the globe. The GATS establishes a basic set of rules for world trade in services, a clear set of obligations for each member country, and a legal structure for ensuring that those obligations are observed. This allows companies to identify which markets are open to foreign service providers and to be sure that markets will remain open in the future. In the event of a disagreement, the Agreement contains a dispute settlement mechanism through which Member countries can attempt to obtain the treatment that they are entitled.



The Agreement establishes a basic set of rules for world trade in services, a clear set of obligations for each Member country and a legal structure for ensuring that those obligations are observed

The GATS covers virtually every aspect of services trade including:

- ▶ the majority of services;
- ▶ almost all the major world markets;
- ▶ the different means by which a service can be supplied to a foreign market customer; and
- ▶ the establishment of commercial operations in foreign markets.

The GATS should be one of the key reference texts used by corporate planners seeking to exploit foreign opportunities, especially outside North America. The next round of the GATS negotiations in 2000, should be a key focus for action by business.

To whom does GATS apply?

All members of the WTO must abide by the GATS. With 133 Members, the GATS covers more than 90% global trade in services. Most of the other major economies have applied to join the GATS, including Russia, Ukraine, China, Taiwan, Vietnam, and Saudi Arabia. Once these countries are admitted, virtually 100% of trade in services will be taking place between countries who have agreed to abide by the GATS rules.

What are the important obligations of the GATS?

The most important obligations of the GATS include the following:

Most-Favoured-Nation (MFN) Treatment. A WTO Member cannot discriminate among foreign service providers by offering more favourable treatment to service providers of any one country. Members are permitted to maintain existing measures which contravene the MFN obligation, but any exceptions must be clearly stated in a Member's MFN exemption list.

National Treatment. In the services sectors listed in a Member's schedule of commitments, a Member cannot take measures to discriminate between domestic and foreign service providers, i.e., foreign companies must be treated as favourably as domestic providers. Any measures which violate the national treatment obligation must be clearly inscribed in a Member's schedule of commitments.

Market Access. In the sectors listed in a Member's schedule of commitments, a Member cannot take measures which are defined in the GATS as restricting market access. Examples of measures which would restrict market access include: quotas, economic needs tests, requirements for certain types of legal entities, and maximum foreign shareholding limits. Any measures which violate the market access obligation must be clearly inscribed in a Member's schedule of commitments.

Domestic Regulation. Members' regulations must be administered in a reasonable, objective and impartial manner. Qualifications and licensing requirements and technical standards must be based on objective and transparent criteria, and not more burdensome than necessary to ensure the quality of the service.

Transparency. Each member shall make public all measures which pertain to the GATS agreement. The WTO must be notified of any relevant changes to government policies, regulations or administrative guidelines which significantly affect trade in services covered by the specific commitments under this Agreement. As well, Members must establish enquiry points and respond promptly to requests for information on their regulatory regimes.

In the event that a member fails to carry out its obligations or specific commitments under the GATS, other members have recourse to the WTO's Dispute Settlement Mechanism.

How does the GATS relate to the day-to-day business of supplying a service?

The GATS covers all the major ways in which service suppliers serve their clients - the so-called modes of supply. This means that countries have to say whether or not they allow:

- ▶ foreign companies to deal with clients in their market from across the border (i.e., electronically);
- ▶ their citizens to travel abroad to the supplier in order to consume a service;
- ▶ foreign service suppliers to establish companies in their market; or
- ▶ suppliers to enter the country in person to do business.

As a result, companies know where they stand in foreign markets and in their dealings with foreign clients. If companies encounter barriers related to these modes of supply, they can verify whether the GATS member concerned has made legal commitments in this area and ask for the assistance of their government in resolving the issue. Members have recourse to a dispute settlement process in case another Member breaks its obligations.

The Bottom Line

The GATS is a broad and comprehensive agreement which gives both guidance and enforceable guarantees to service suppliers who are seeking to supply services to foreign clients. Whatever the service sector, whatever the means of supplying the service and whatever the target markets within the WTO Member countries, the provisions of the GATS provide guidance. When in doubt about their rights in a foreign market, or when seeking to clarify the opportunities open to them, GATS should be a first point of reference for all service suppliers.

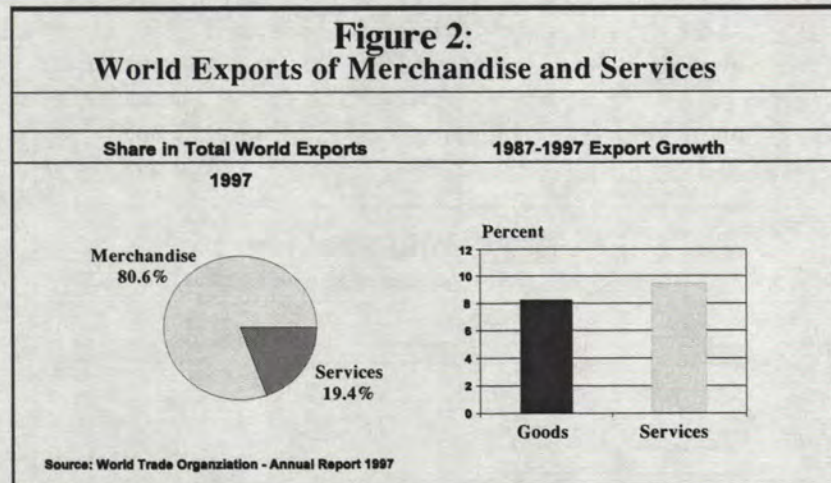
The GATS is primarily helpful to service exporters, but it also benefits other Canadians. As a result of facilitating increased trade and competition in services, business and consumer users of services have access to a broader spectrum of service suppliers and more competitive prices. All citizens stand to benefit from the new job opportunities and growth which can result from increased trade in services.

As the Canadian government conducts its pre-negotiation consultations, now is the time for industry and other interested parties to identify the foreign trade restrictions they would like see alleviated. Armed with this information, the government will strive to achieve an agreement that reflects the interests of Canadian industry and public.

III. THE IMPORTANCE OF TRADE IN SERVICES

The International Story

Within the global economy, the significance of trade in services is hard to ignore. In 1997, world trade in commercial services, measured on a balance-of-payments basis, accounted for approximately one-fifth of global exports of goods and services, a total of US\$6.8 trillion. Consequently, trades in commercial services is currently valued at more that US\$ 1.2 trillion worldwide.



However, commercial potential extends significantly beyond simple cross-border flows of services. It is estimated that trade in services through commercial presence could be at least as large as cross-border trade - that means that the balance of payments figures may only account for half the actual trade in services.* Several groups argue that services account for approximately 60% of the world's economic output, or more than US\$14 trillion in economic activity which could be within the reach of international competition.

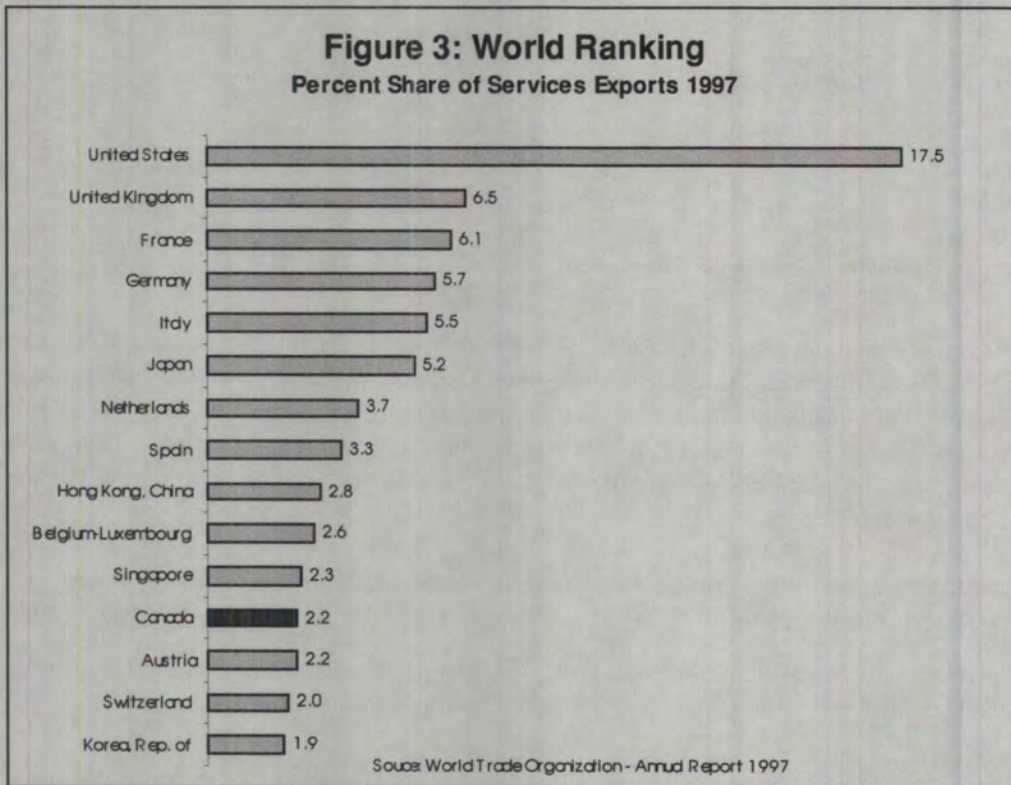
* **Cross-border trade in services** - where trade takes place from the territory of one member into that of another. Only the service itself crosses the border, without the movement of persons, e.g., Engineering plans sent by wire or satellite.

Commercial presence - any type of business or professional establishment, including branches and representative Offices, e.g., direct investment in the cost country. This data is currently unavailable.

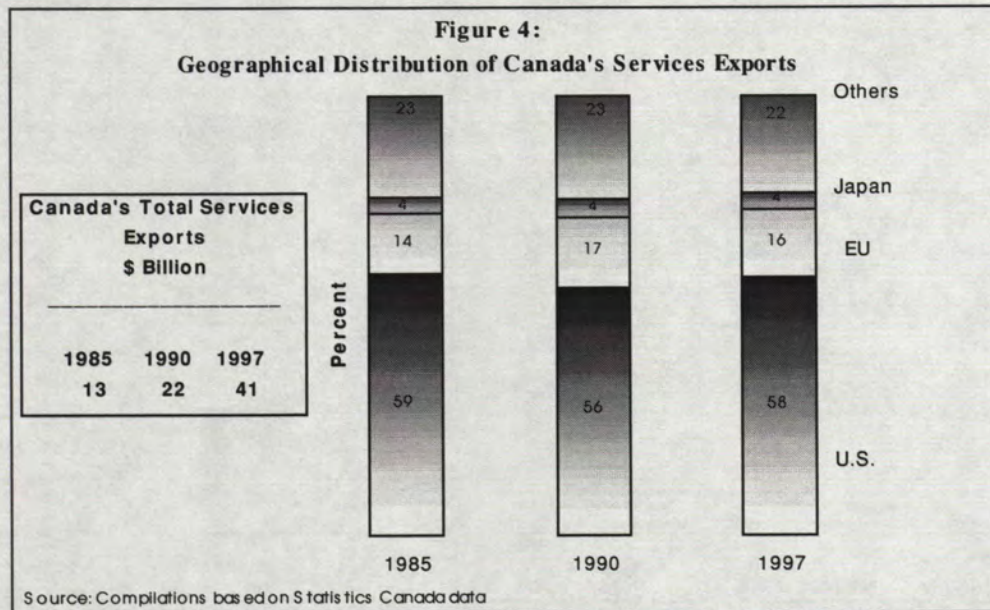
Canada's Position

The services industries already play an important role in the Canadian economy and the service industries are growing faster than other components of Canadian Gross Domestic Product (GDP). Currently, these domestic industries account for two thirds of GDP, almost three-quarters of employment, and nearly 90% of new job creation in Canada.

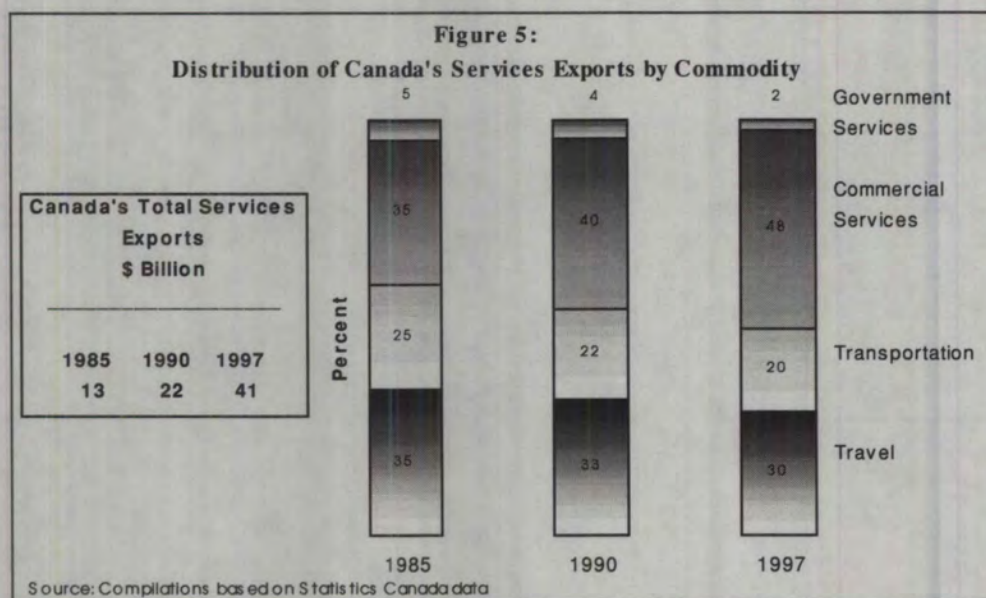
In 1997, the service industries generated 12.1% of total exports; these exports accounted for 4.8% of Canada's GDP. At the same time, service imports represented 5.8% of Canada's GDP. Between 1987 and 1997, service exports grew on average by 9.1% a year, with commercial service exports growing at the more rapid pace of 11.2% per year. In addition, Canada's trade deficit in services fell from a peak of \$13.4 billion in 1993 to \$8.8 billion in 1997. As a result, Canada ranked 12th in the world for its exports of services in 1997 - representing 2.2% of the world's total services exports.



As with merchandise trade, the U.S. continues to be the main destination of Canada's services exports. However, the exports of services are more internationally diversified and the U.S. accounts for only 60% of total exports. One-fifth of Canada's services exports are bound for the European Union and Japan. The rest of services exports go mostly to other Asia Pacific and Latin America countries.



Between 1985 and 1997, the share of commercial services exports in total services exports rose by 13 percentage points to 48 percent. Commercial services include telecommunications; computer and information services; insurance and financial services; management consultant services; R&D services; and intellectual property services and royalties. During the same period, transportation and travel services grew at a slightly lower rate and now represent a smaller part of Canada's service exports.



While it is true that almost 50% of Canada's trade in services is made by the 100 largest companies in the service sectors, small and medium service firms are more likely to be engaged in exports than their goods producing counterparts.

...and this means?

In light of the increasing tradeability of services and the growing importance of the service sectors to the economy, the prospects for more rapid growth in services trade are excellent. Canada clearly has the expertise and capabilities necessary to succeed in selling its services into rapidly growing international markets. In particular, Canadian environmental services companies are well positioned to capitalize on this growing trend of trade in services. An enhanced framework of rules to further liberalize services trade will assist such expansion.

IV. THE ENVIRONMENTAL SERVICES INDUSTRY

What is the environmental services sector?

This sector has proven to be relatively difficult to define in light of recent changes in technology and approaches to environmental protection and preservation. In the Services Sectoral Classification List developed during the Uruguay Round (latter referred to as the WTO Classification), and largely based on the United Nations Central Product Classification (CPC), the environmental services sector is defined to include: (i) sewage services; (ii) refuse disposal services; (iii) sanitation and similar services; and (iv) other environmental services - i.e. cleaning of exhaust gases, noise abatement services, nature and landscape protection services, and other environmental protection services not included elsewhere. Most WTO Members scheduled their GATS commitments based on this definition. From an environmental policy perspective, however, this classification may appear unduly limited because it does not include all the services which may benefit the environment.

Since the environmental industry is evolving beyond its traditional focus on pollution control and clean-up to a broader range of pollution management systems, work has been undertaken at the OECD to develop a more comprehensive definition of the environment industry. This definition includes services provided to "measure, prevent, limit, minimize or correct environmental damage to water, air, soil as well as problems related to waste, noise and eco-systems." This classification system encompasses services relating: (i) to pollution management, including those related to the construction and installation of facilities for such purposes; (ii) to the installation and utilization of cleaner technologies and products; and (iii) to technologies and products which reduce environmental risk and minimise pollution and resource use.

This OECD definition of environmental services, however, tends to overlap with several other sectors which have been scheduled separately in the GATS. For instance, construction and engineering services often involve activities that are intended to reduce or manage damage to the environment. Other service sectors that may also overlap with this definition of environmental services include business services, research and development, and education/training services. In addition, environmental goods and services are increasingly being offered on an integrated basis and as a result it is difficult to separate the two statistically. For instance, the installation of a catalytic converter which reduces pollution pumped in the air involves both a good (the catalytic converter) and a service (the installation of this technology). Because many environmental services are provided by governments data is gathered under general government services. The end result is that the environmental services sector is difficult to define and measure.

The International Market

As a result of the definition and classification complications identified above, statistics on environmental services are difficult to find and tend to vary from country to country. The United Nations estimates that in a "representative" industrialized country environmental services account for less than half a percent of total services output. This figure may, however, be an understatement because some of the activity in this sector is likely shown as part of other services sectors, including government services.

According to the OECD (COM/TD/ENV(98)37), the global environmental market (both goods and services) in 1996 was estimated to be \$453 billion, of which the services segment (based on the WTO definition) accounted for a little over half at \$229 billion. Within services, solid waste management (\$102 billion) and water treatment services (\$65 billion) were the dominant activities. Among the most important reasons for growth of the market, in addition to economic and pollution growth and increased urbanisation, are the increasing stringency of domestic environmental regulations, evolving international environmental standards, and stronger pressure from consumers and communities.

The United States, Western Europe and Japan together accounted for 87% of the global market. However, growth rates in these markets have declined significantly in recent years as compliance with existing environmental legislation has been achieved by the major industrial sectors. Although Africa, Asia, and Latin America together accounted for only around 7% of the market, these are the regions in which the fastest growth is predicted.

Available evidence suggest that there has been a tendency towards increasing concentration in the environmental industry. A study on mergers and acquisitions in the U.S. in the environmental industry suggest that increasing returns to scale and consumer preferences favour large firms which tend to achieve higher revenues than their smaller rivals. Technological developments favour large firms because environmental processes are becoming more complex and integrated. Small firms find it difficult to fund the necessary equipment investments. At the same time, more stringent regulations induce customers like municipalities to use few large environmental service suppliers in order to more easily monitor compliance and trace liability. Small companies remain in existence by providing specialized services to specific environment-related systems and acting as sub-contractors on large projects.

As new legislation is becoming increasingly "market-driven," there is pressure to improve the technology being used by the environmental industry. Research and development (R&D) in the industry has been particularly high, with the large multinational environment companies spending 8-10% of their turnover on R&D. Emphasis is shifting from "end-of-pipe" activities, which capture pollutants from output stream, to the use of cleaner technologies, which reduce the amount of pollutants generated in the first place.

Trade in environmental services

Historically the opportunities for trade in environmental services were limited because major "public infrastructure" projects, such as water treatment and waste disposal services, were provided by governments. However, over the past decade the combination of regulatory frameworks for the management and control of pollution, growing public sensitivity to environmental problems, and privatisation and liberalisation trends have created private demand for environmental services bring these services more into the market domain. The international environmental services market has developed out of trade in environmental-related equipment and technology, and services to establish or upgrade industrial and public infrastructure plants, particularly in relation to water treatment, waste management and air pollution abatement. The adoption of world-wide environmental standards also generates growth in the international environmental goods and services markets (e.g. the Montreal Protocol in respect of CFC replacement strategies); whereas domestic privatisation and deregulation in public utilities may generate foreign investment and services competition. Internationalisation is also spurred by consolidation among providers and the global reach of large engineering firms.

It is difficult to obtain an idea of the magnitude of trade because there are few statistics for trade in environmental services. For selected countries, some estimates exist for the environmental industry as a whole, including both goods and services. These figures suggest that in 1992, the U.S., Germany and Japan had large surpluses in environmental trade (\$1,113 million, \$78 million, and \$720 million respectively) while Chinese Taipei, Mexico and Canada were among the major net importers (\$286 million, \$284 million, and \$612 million respectively). More recent figures for the U.S. estimate that in 1996 US exports of environmental services were \$3.4 billion while imports were \$1.4 billion.

Smaller countries like Finland and Norway are reported to have highly internationally-oriented industries, exporting around half their production, but they do not have a large share of the global market. Recently, firms in Australia, Canada, and the United Kingdom are reported to have increased their efforts to expand environmental exports.

A large part of trade in many environmental services appears to take place through commercial presence with the accompanying presence of natural persons. A number of supporting services, however, may be supplied through the other modes as well. Currently, the statistics are not available to validate the relative importance of delivery modes.

It is expected that the industry will become increasingly trade oriented, particularly in more mature areas such as waste and water management, and air pollution control. The adoption of worldwide environmental standards will expand international markets, while at the same time privatization and deregulation of utilities may expand opportunities for foreign participation. The trends towards consolidation in the industry and increasing firm size are also likely to lead to greater internationalization.

Since environmental goods and services are increasingly being offered on an integrated basis, it is important to consider the impact of trade in goods on services trade. Recently, environmental services have become more important, not only in their own right, but also as integral to the utilisation of environmental technologies and products in pollution and resource management projects. As a result, barriers to international trade in environmental goods may prevent the full benefits of liberalisation of international trade in environmental services from being realised.

The Canadian Snapshot

The Canadian environment industry is composed of both goods producers and service providers. In fact, some firms provide both goods and services in conjunction. Approximately two-thirds of the environmental firms in Canada provide services, such as solid waste and wastewater management and treatment, water supply and purification, water, soil and air quality testing, and environmental engineering. According to Statistics Canada's preliminary estimates, these services activities amounted to over \$9 billion, or just under 60 percent of total 1995 domestic production.

Firms in this industry provide a wide range of pollution prevention and environmental conservation, remediation and enhancement technologies, processes, products and services. Due to the integrated nature of the goods and services industries, it is often difficult to obtain accurate measures of employment for environmental services alone.

The Canadian environmental industry consists of some 4,000 firms employing 123,000 workers. These firms range from one-person operations to large multinational corporations, with the majority of employing fewer than 50 people. Preliminary data from Statistics Canada indicate that Canadian industry produced environmental goods and services valued at \$15.6 billion in 1995. The business sector accounted for just over half of the goods and services produced, with output of \$9.3 billion and employment of 58,250 workers. The remaining \$6.3 billion was attributable to business and government activities to supply their own needs.

Canadian firms have gained international recognition for their expertise in developing water and wastewater treatment technologies, handling liquid and solid wastes, manufacturing environmental equipment such as shredders, as well as for their environmental engineering and consulting expertise.

While there is insufficient data to document the historic performance of the Canadian environmental industry, the evidence suggest that this is a rapidly growing sector. Factors driving the domestic growth include increased emphasis on pollution control, new international environmental accords, and the implementation of sustainable development strategies. However, the industry has been cyclical, dependent on the economy and the level of investment available at any given time.

The Canadian environmental industry is in transition and those segments of the industry that are maturing are undergoing a process of rationalization and consolidation. Many small firms are being taken over or merged to form larger entities better able to compete internationally. Many Canadian firms are also establishing partnerships, joint ventures or strategic alliances. These partnerships increase economies of scale for small Canadian firms allowing them to compete effectively on an international level.

While trade estimates are recognized to be incomplete, sources suggest that approximately \$1.7 billion worth of environmental goods and services are exported from Canada. This represents about 10 percent of the environment sector's total commercial production. The U.S. market was the destination for about 80 percent of Canada's environmental exports. Canada provides environmental protection services to the United States, Europe and developing countries and is currently thought to run a trade surplus in this area. However, with incomplete trade statistics, it is not possible to assess Canada's trade balance in environmental services.

Compared with Canada, countries such as Japan and Germany are much more export-oriented, exporting well over 20 percent of their production. Canada has the potential to participate more fully in the global environment market. Approximately 600 Canadian environmental companies are currently exporting, and this number is expected to double early in the next century.

Opportunities in export markets offer some of the best prospects for the future growth of the environment industry and the creation of high-paying jobs for Canadian workers. The benefits of pursuing an export strategy can be seen from the experience of Canadian companies that have been highly successful in developing foreign markets for their products and services. In addition, twenty-six of Canada's embassies abroad have identified the environment sector as a priority in terms of pursuing export opportunities.

The most promising opportunities for Canadian firms are likely to be found in international markets. For instance, global demand in the water treatment sub-sector, where Canadians have particular expertise, is growing at almost 8 percent per year and is expected to reach US\$78 billion by 2000. There is a rapidly growing demand for a wide range of environmental goods and services in developing countries, many of whom have no domestic environmental firms to help local industry comply with newly implemented environmental regulations or to comply with the requirements attached to projects financed by international financial institutions (IFIs).

Canadian firms abroad ...

The North American Free Trade Agreement (NAFTA) has expanded trade, investment and technology development opportunities in the U.S. market and, in recent years, Canadian shipments of

environmental products and services to the U.S. have increased. Mexico still remains a challenge, although a number of Canadian companies are making inroads into this market.

Promising opportunities exist in South America, especially Chile, Argentina and Brazil, where a number of large projects financed by international financial institutions (IFIs) are being initiated. Canadian firms are aggressively exploring business opportunities in South America, particularly those arising from the needs of the mining, oil and gas, and resource processing sectors.

A number of Canadian firms have been attracted by growing demands of Asian countries, including China, Republic of Korea, Taiwan and the Association of Southeast Asian Nations (ASEAN). A core of Canadian firms is now active in Indonesia, Malaysia, Singapore and Thailand, where Canadian consortia and individual companies have won a number of contracts. While most major projects in China are financed by IFIs such as the World Bank and the Asian Development Bank, there appear to be opportunities in the Chinese provinces for firms that can forge successful alliances with local governments and agencies. India is another country that is seen to offer promising opportunities for Canadian suppliers of environmental technologies and services.

European environmental regulations and standards have become an important trade policy issue. Canadian manufacturing firms interested in doing business in Europe are becoming increasingly aware of the advantages of ISO 14000 certification. This environmental management quality standard developed through the International Organization for Standardization (ISO) is aimed at ensuring that, among other things, firms meet regulatory and other mandatory requirements and act in an environmentally responsible manner. Canadian exporters have reacted well to the ISO 14000 challenge. An increasing number of firms have adopted, or are preparing to adopt the standards, and many consulting firms now offer both registration and training services to assist firms to become certified for ISO 14000. Canadian environmental firms play an important role in helping Canadian exporters satisfy ISO 14000 standards.

IFIs are a significant factor in the market because of their increasing commitment to environmental projects, and their requirement that IFI-financed projects be assessed in terms of their environmental implications. In 1997, the World Bank loaned in excess of US\$11.6 billion to projects targeted at protecting and improving the environment and supporting environmentally sustainable development. While Canada continues to be successful in winning front-end consulting contracts, major capital project contracts remain a major challenge for Canadian firms.

V. REGULATORY STRUCTURE AND OTHER RELEVANT TRADE BARRIERS

Globally...

Governments have been heavily involved in environmental protection and the provision of many environmental services. Not only have governments established regulations to ensure the protection of the environment, but they have also provided many environmental services themselves. Because many of environmental services display characteristics of natural monopolies, as in the case of sewage services, or of public goods, as in the case of cleaning public spaces, governments have been prompted to produce these services themselves. Fear that private monopolies would exploit consumer or that private firms could not profitably provide the services have encouraged governments to play a significant role in environmental services. However, the situation is changing and governments are slowly removing themselves from the provision of environmental services. Where monopolistic market structures cannot be avoided, regulated private ownership is increasingly preferred to public ownership and where public good problems cannot be avoided, the government is contracting out the provision of these services to the private sector. Now that these services have come into the realms of the marketplace, the focus on is barriers to foreign participation.

As mentioned above, the suppliers of the major environmental services rely significantly on the commercial presence mode of supply. Hence, barriers which limit the ability of firms to establish a commercial presence and to employ nationals from their home country affects the international activities of environmental service suppliers. The foreign investment regime crucially affects conditions of market access in many countries. Limitations on foreign investment that potentially have a strong effect on this sector include those on: (i) the extent of foreign ownership (i.e. limitations on foreign equity); (ii) the type of legal entity required (i.e. local incorporation requirements); (iii) the ownership of specific assets (i.e. restrictions on purchases of landfills); and (iv) the scope of operations (restrictions on the number of branches). Similarly, the requirement to form a joint venture with local supplier curtails the freedom of foreign suppliers to decide on the optimal business arrangement. More generally, the application of economic needs tests to determine whether new entry will be allowed, reduces transparency and leaves administrators with a degree of discretion.

Given this sectors dependence on skilled professionals such as engineers the sector is affected by limitations on the movement of natural persons. Residency requirements for managers and directors *de facto* disadvantage foreign suppliers even when the requirements are imposed on all distributors.

Even though governments are increasingly stepping out of the supply of environmental services, government procurement still plays an important role in the environmental industry. In the WTO, the Agreement on Government Procurement (AGP) is a plurilateral agreement which covers the procurement of government services. Nearly all 26 signatories to the AGP (mainly developed countries) have included the full range of environmental services within the scope of their commitments subject to

certain restrictions. However, this does not necessarily ensure that all procurement of these services takes place on a non-discriminatory basis. For example, "buy national" requirements, sectoral carve-out and the lack of coverage for sub-national governments make access to government projects difficult for foreign companies. Also, the AGP rules apply only above the thresholds specified by each country in the Agreement's annexes.

Many environment services (i.e. sewage services) tend to favour natural monopoly because of the high fixed costs of entering the market. Governments have generally felt the need to regulate prices and quality in these areas. However, these monopolies may hinder access by foreign suppliers or may chose not to purchase services from the international environmental market.

As mentioned earlier, in addition having direct government involvement, the environmental services sector is affected by a wide range of government regulations. First of all, there are regulations which apply to all industries and hence influence the demand for environmental services. Then there are the regulations which are directly targeted towards environmental services such as urban planning restrictions on the location of disposal sites. In many cases, regulations are designed to remedy market imperfections. However, where regulations are more burdensome than necessary to achieve the objective, they can distort the market and increase the costs.

Environmental regulations tend to be of a technical nature and do not usually restrict the way businesses deliver their services. In addition, there has recently been a greater emphasis on economic incentives than on government control. An example is emission fees, which require firms pay a tax on their pollution equal to the amount of external damage. The possibility still remains that domestic regulations may favour local suppliers over international competitors. For example, barriers to trade can arise from the costs, delays and uncertainties created by regulations and enforcement. It is important to ensure that environmental norms are established so as to ensure that they do not become technical barriers to trade.

Within the context of regional economic integration, the Asia-Pacific Economic Cooperation (APEC) identified environmental goods and services as one of the 15 priority sectors for early voluntary liberalization. A consolidated list of environmental services has been prepared as part of the ground work for further consultations aimed at identifying the services to be covered by the agreement. APEC work on environmental services is continuing, but the OECD and the WTO now offer the key forums for substantive discussion and analysis on environmental services leading up to the GATS negotiations.

And In Canada...

The Canadian environmental industry relies on sales to both the public and private sectors, with the public sector being the largest market for domestic environmental services. For example, municipal

governments are major purchasers of solid waste management, recycling, and environmental production services.

Regulations applicable to the environmental services sector exist at the federal, provincial and municipal levels. The majority of Canadian regulations relate to the protection of the environment. Municipalities also maintain some zoning requirements which restrict locations of waste disposal sites.

Government policies related to environmental protection have played a key role in the growth of the environmental services industry. More recently, governments have attempted to respond to the high costs of enforcing regulations by shifting more responsibility for environmental control to the private sector. The development of a Canadian pollution prevention strategy in 1995 signalled a shift in emphasis by the federal government from attempting to manage pollution to pollution prevention. The new focus is on promoting efficient conservation strategies through which private firms will contribute to the broader objective of sustainable development.

As governments at all levels decrease their reliance on strict regulation, voluntary agreements by industry to limit toxins or prevent pollution are becoming more common. Examples include the Canadian Chemical Producers' Association (CCPA) Responsible Care ® Program, Major Industrial Accidents Council of Canada (MIACC), and the Accelerated Reduction/Elimination of Toxics (ARET) program. A 1996 GlobeScan survey of 100 sustainable development experts from primarily OECD countries showed that the importance of voluntary approaches has increased. These voluntary codes should not be ignored in international competition and trade.

The influence of governments on the Canadian environmental industry extends beyond their role as regulator; the public sector is an important purchaser of environmental goods and services. Municipalities in fact account for over 50% of the total domestic market. In addition, the federal government's procurement policy commits the Government of Canada to conduct all its operations in an environmentally responsible manner. Several provinces have also implemented "green" procurement procedures.

VI. ANALYSIS OF GATS COMMITMENTS RELATED TO ENVIRONMENTAL SERVICES

The Horizontal Commitments to consider...

As mentioned earlier, all Members committed to the basic precepts of trade liberalization in services, including the Most-Favoured-Nation (MFN) Treatment. In addition, several members also agreed to some basic horizontal issues. These consist of broad measures affecting investment, real estate transactions, government subsidies or taxation, and the temporary movement of natural persons. To

assess the full extent of trade liberalization, horizontal restrictions have to be examined in conjunction with sector-specific commitments.

Two instances of horizontal limitations may be particularly relevant to environmental services. The schedule of the European Union (covering their member states) indicates that services considered as public utilities (which include environmental services) at a national or local level may be subject to public monopolies or to exclusive rights granted to private operators. Turkey's schedule also indicates that public utilities are provided by public monopolies and these areas are therefore closed to private investment. These restriction directly affect foreign competitors trying to enter markets in the E.U. and Turkey.

...in light of the Sector-Specific Commitments

The remaining commitments are identified in the sector-specific schedules of each Member country. In the service sectors listed in their schedules, unless otherwise identified, Members agree to the basic obligations of the GATS: national treatment and market access.

As a result of the Uruguay Round and subsequent WTO accessions, 49 WTO Member countries have made commitments in at least one of the environmental sub-sectors. However, the European Community has a consolidated schedule for its all its member states. New Caledonia, a territory of France, also made commitments in environmental services bringing the total number of countries with commitments to 50. Table 2 in Annex B identifies which countries made commitments in the various sub-sector of environmental services. The number of commitments in the individual sub-sectors is roughly equal; 41 countries made commitments in sewage services and "other" environmental services; and 42 countries made commitment on sanitation and similar services and refuse disposal. Slightly fewer countries made commitments on the individual segments of other environmental services. Even though many WTO Members have not made commitments in any of these sectors, according to the WTO Secretariat, those Members with commitments account for over 86% of the GDP of all Members.

Analysis of the level of commitments can be done by categorizing the commitments as: full commitments (no limitations, implying total liberalization); partial commitments (those made with certain limitations); and no commitments (unbound). Tables 1A and 1B present the results of this analysis of the schedules. Since commitments on the presence of natural persons is uniformly low across all sub-sectors, the following analysis focuses on cross-borders supply, consumption abroad and commercial presence. There are significant differences between participating Members to the extent of the binding and the restrictiveness of scheduled commitments. Fully liberal commitments on all modes of supply are rare and have only been made by Ecuador for the full range of environmental services. Rwanda also made full commitments but only for sanitation and similar services.

Table 1A:
Numerical Analysis of Commitments made by Members in Environmental Services

Sector	Cross-Border Supply				Consumption Abroad			Commercial Presence		
	full	partial	unbound*	none	full	partial	none	full	partial	none
Sewage Services	3	6	8	10	10	13	4	2	25	0
Refuse Disposal Services	3	6	7	10	10	12	4	2	24	0
Sanitation and Similar Services	5	5	8	10	12	11	4	3	25	0

Notes:

1. Full commitment is indicated by "none" in the market access column of the Schedule.
2. Partial commitment is when there are limitations inscribed in the market access column of the Schedule.
3. No commitment is indicated by "unbound" in the market access column of the Schedule.
4. Unbound* means that the commitment is unbound because this mode of delivery was deemed to be "not technically feasible."
5. The EU is counted as one Member.

Table 1B:
Numerical Analysis of Commitments made by Members in Environmental Services
(Closer Analysis of the Shaded Columns in Table 1A)

Sector	Cross-Border Supply			Consumption Abroad			Commercial Presence			Limitations on sectoral coverage
	Only horizontal limitations	Sector-specific limitations		Only horizontal limitations	Sector-specific limitations		Only horizontal limitations	Sector-specific limitations		
		MA	NT		MA	NT		MA	NT	
Sewage Services	1	0	0	5	0	0	14	2	1	11
Refuse Disposal Services	1	0	0	6	0	0	13	6	1	11
Sanitation and Similar Services	1	0	0	6	0	0	20	0	1	10

Notes:

1. Some members have maintained limitations on sectoral coverage as well as horizontal and sector-specific limitations. The figures in the rows do not, therefore, add up to the number of Members with limitations.
2. MA is short for Market Access.
3. NT is short for National Treatment.
4. The EU is counted as one Member.

Cross-border supply and consumption abroad are likely of limited relevance for environmental services, but there may be some scope for utilising these modes for certain support services. Members' differ in their judgement of the feasibility of the cross-border supply mode. In each of the three sub-sectors, several Members have indicated that cross-border supply of the services is not technically feasible. Other Members have made full commitments or have no commitments for cross-border supply. In each sub-sector, far more Members have made fully liberal commitments on consumption abroad (between 10 and 12) than on cross-border supply (between 3 and 5). Most commitments on commercial presence are limited. Many of the restrictions on commercial presence are established in the horizontal section and apply to all sectors including environmental services.

Limitations in General

Although 50 countries provided schedules for environmental services, there were limitations to the commitments. Annex B contains a map identifying the limitations to GATS commitments by region. The most significant barriers appear to be investment/establishment, entry and stay of service managers, professionals and experts, and government procurement practices.

Several commitments are limited because Members have chosen to exclude certain services from the various sectors. There is considerable variation in the scope and type of exclusions; some countries go as far as restricting the commitments to consultancy services only. Notable is that several Members have specified that their commitments do not include public service functions whether owned and operated or contracted out by the local, regional or central government. The GATS covers any service which is provided on a commercial basis and generally allows the exclusion of any services supplied in the exercise of government authority. However, there is some debate over what the term "commercial basis" means.

As illustrated in Table 1B above, there are relatively few sector-specific limitations on market access. One limitation identified by several countries is a requirement to obtain a license. However, it should be noted that a licensing requirement must only be scheduled if it is used to implement a quantitative restriction or if it discriminates between national and foreign suppliers. There is also one instance of explicit numerical quotas, one other instance where it is stated that the number of licenses issued may be limited, and two instances where establishment is subject to an economic needs test. Two countries identify that there are monopolies in control services of exhaust gases from cars and trucks and another identifies monopolies for certain types of waste. Other limitations include jurisdictional restrictions and domicile requirements for refuse collection.

For national treatment, the only limitation is that one country restricts the right to withhold national treatment for entities in which foreign equity participation exceeds 49%.

And Canada Specifically...

Canada has made commitments on all environmental services. This includes commitments on the following "other" environmental services: cleaning services of exhaust gases; noise abatement services; nature and landscape protection services; and other environmental services not elsewhere classified. The only limitation is that the presence of natural persons is unbound except as indicated in the horizontal section.

In the horizontal section, Canada allows entry or temporary stay of natural persons who fall in one of the following categories: executives, manager, specialists, professionals with necessary academic credentials and qualifications, and intra corporate transferees. These commitments involve only short term stay in Canada and do not affect Canada's immigration policy.

Also in the horizontal section, Canada limits the acquisition and control of a Canadian business by non-Canadians. Approval for all direct acquisitions of Canadian businesses with assets not less than a monetary amount established annually and published in February of each year in the Canada Gazette. In 1998 the threshold was C\$179 million for WTO Members.

VII. PROPOSED CANADIAN OBJECTIVES FOR GATS 2000 NEGOTIATIONS

Canada's objective for the next round of GATS negotiations is to improve the quality and quantity of schedules offered by Members. Based on initial analysis, the following have been identified as proposed objectives for the consulting engineering sector (this list is only partial list and is open to review):

- ▶ Securing better market access for the *commercial presence* mode of delivery by negotiating less restrictive investment measures, nationality requirements, fewer stipulations regarding the type of corporate entities Canadian firms can establish abroad;
- ▶ Securing improved access for professionals and natural persons;
- ▶ Improving transparency requirements and ensuring consistency of domestic regulation to facilitate foreign entry;
- ▶ Achieving higher levels of liberalisation in a variety of other professional service sectors given that these sectors overlap with and are complementary to environmental services; and
- ▶ Increasing the number of countries making full commitments in the environmental service sector.

VIII. LET US KNOW WHAT YOU THINK

Those involved, or interested, in the exportation of Canadian engineering services can assist the government in refining these general objectives by providing information on their particular international activities and experiences. The following questions are offered as guidelines for formulating input.

- ▶ Please briefly describe your main international activities and identify the countries where you are most active.
- ▶ In order, what are the most important methods by which you reach your foreign clients:
 - I. establishing a legal entity in the foreign country (i.e. subsidiary or branch);
 - II. temporarily sending personnel to the client's foreign location;
 - III. by mail;
 - IV. over the phone;
 - V. by fax;
 - VI. transmitting your services electronically over the Internet; or
 - VII. having the foreign client visit you in Canada?

- ▶ In the future, do you anticipate that your method of delivering services internationally will change from that listed above? Please describe any changes.
- ▶ Do you expect to expand your international activities in the future? Please identify countries of interest and the general type of activities you would like to undertake.
- ▶ If you have limited or curtailed your international activities, was it as a result of:
 - 1. barriers to foreign market access;
 - 2. lack of government procurement opportunities;
 - 3. lack of commercial competitiveness; or
 - 4. other barriers?
- ▶ Please identify any specific measures that have hindered your international business.
- ▶ Negotiation of a multilateral agreement on services trade may well involve an exchange of commitments in which each country would agree to further liberalization of its domestic market. Are there any Canadian measures affecting your sector that you consider should not be liberalized? Why?
- ▶ What would you consider the priority concerns with respect to the liberalization of trade in services? (Rank the following from most to least important.)
 - 1. Preferences to buy from local companies
 - 2. Investment limits or restrictions
 - 3. Restrictions on the form of commercial establishments (i.e. partnership, joint venture, etc.)
 - 4. Immigration/temporary entry restrictions
 - 5. Limitations on the number of service providers (i.e. quotas, exclusive rights, etc.)
 - 6. Non-recognition of professional credentials
 - 7. Lack of transparency of local practice/licensing regime
 - 8. Restrictions on access to government procurement projects
 - 9. Subsidies and tax incentives
 - 10. Licensing requirements
 - 11. Qualification requirements
 - 12. Restriction on the use of company names
 - 13. Residency/citizenship requirements
 - 14. Restrictions on fee-setting
 - 15. Unfair bidding practices
 - 16. Currency controls
 - 17. Others _____

- The current definition for environmental services in the GATS covers only: sewage services, refuse disposal services, sanitation and similar services, and other environmental services (i.e. cleaning of exhaust gases, noise abatement services, nature and landscape protection services and other environmental protection services not included elsewhere). Do you feel this classification should be changed to include a broader set of services intended to protect and preserve the environment? What activities would you like to see included in this broader definition include?

If you wish to provide your views to the government, please forward your input to:

GATS 2000
International Investment and Services Directorate
Industry Canada
235 Queen Street
Ottawa, Ontario
K1A 0H5
Attention: Robert Ready
Telephone: (613) 954-2354
Fax: (613) 952-0540
E-mail: ready.robert@ic.gc.ca

IX. ACKNOWLEDGEMENTS AND REFERENCES

Much of the information in this document was sourced from the following documents:

Environmental Industry - Overview and Prospects: A Sector Competitiveness Framework prepared by the Environmental Affairs Branch of Industry Canada.

Canada in the Global Context: A statistical overview of the Canadian services economy prepared by the Service Industries and Capital Projects Branch of Industry Canada.

Environmental Services: A background note prepared by World Trade Organization Secretariat.

Assessing Barriers to Trade in Services - Environmental Services: An overview of the environmental services sector and analysis of main barriers to trade in environmental services prepared by the OECD Working Party of the Trade Committee.

X. ADDITIONAL INFORMATION SOURCES

About the Environmental Industry or Service Industries in General

Additional information on the environmental services sector can be found on the Strategis Website under Business Information by Sector:

<http://strategis.ic.gc.ca>

or please contact:

Pierre Ricard-Desjardins
Environmental Affairs Branch
Industry Canada
235 Queen Street
Ottawa, Ontario
K1A 0H5
Telephone: (613) 954-1854
Fax: (613) 954-3430
e-mail: ricarddesjardins.pierre@ic.gc.ca

About GATS

The legal text of the GATS is part of the *Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations*, and can be purchased through any government bookstore. It is publicly available through the WTO web site at:

<http://www.wto.org/wto/legal/finalact.ht>

The WTO website also provides additional background material on the structure of the GATS and on recent sectoral negotiations at:

<http://www.wto.org/wto/services/services.ht> .

The EU also provides a practical examination of the WTO GATS commitments on their website at:

<http://gats-info.eu.int/>

You can also contact:

Paul Henry
Policy Analyst
Services Trade Policy Division (EBS)
Department of Foreign Affairs and International Trade
125 Sussex Drive
Ottawa, Ontario
K1A 0G2
Telephone: (613) 944-0487
Fax: (613) 944-0058
e-mail: paul.henry@dfait-maeci.gc.ca

More information on the GATS 2000 Agenda

Visit Industry Canada's Service Industry Website on Trade in Services at:

<http://services2000.ic.gc.ca/>

Other Useful Information Link on the Internet

The United States International Trade Commission (USITC) is an independent, quasi-judicial federal agency that provides objective trade expertise to both the legislative and executive branches of

government, determines the impact of imports on U.S. industries, and directs actions against certain unfair trade practices, such as patent, trademark, and copyright infringement. USITC analysts and economists investigate and publish reports on U.S. industries and the global trends that affect them.

Their web site is <http://www.usitc.gov/>

ANNEX A:

DEFINITIONS AND GLOSSARY OF GATS TERMINOLOGY

Agreement on Government Procurement (AGP) - One of two WTO plurilateral agreements to which not all Members are signatories. Its purpose is to open up as much of government procurement business as possible to international competition. It is designed to make laws, regulations, procedures and practices regarding government procurement more transparent and to ensure they do not protect domestic products or suppliers, or discriminate against foreign products or suppliers.

Balance of Payments - The difference between the income and expenditure of a country on its external account, resulting from exports and imports of goods, services, and governmental transactions.

Bound commitment - Commitment that cannot be made more restrictive in the future; only further liberalization is permitted (unless agreed penalty is paid).

Commitment - A measure, usually regarding market access and national treatment, that affects international trade in services. Commitments are listed in national schedules and identify service sectors and modes of supply that are affected.

Emergency Safeguards - Measures suspending commitments under certain emergency situations.

Environmental Services Definition - Most countries use the World Trade Organization's Services Sectoral Classification list to define what is meant by Environmental Services when making commitments in these sectors. This sector correspond to the United Nations Central Product Classification (UN CPC) at the four-digit level. The definition includes:

- ▶ **Sewage services (CPC 9401)**: Sewage removal, treatment and disposal services. Excludes collection, purification and distribution services of water. Excludes construction, repair and alteration of sewers;
- ▶ **Refuse disposal services (CPC 9402)**: Refuse collection and disposal services; collection of services of garbage, trash, rubbish and waste (household, commercial and industrial), transport services and disposal services, waste reduction services. Excludes dealing and wholesale in waste and scrap. Excludes R&D services on environmental issues;
- ▶ **Sanitation and similar services (CPC 9403)**: Sanitation and similar services including outdoor sweeping, snow and ice clearing. Excludes disinfecting/exterminating services for buildings. Excludes pest control for agriculture; and
- ▶ **Other environmental services** including:
 - ▶ **Cleaning of exhaust gases (CPC 9404)**: Emission monitoring and control services of pollutants into the air, whether from mobile or stationary sources, concentration monitoring, control and reduction services of pollutants in ambient air;

- ▶ *Noise abatement services (CPC 9405):* Noise pollution monitoring, control and abatement services, e.g., traffic-related noise abatement in urban areas;
- ▶ *Nature and landscape protection services (CPC 9406):* Ecological system protection services, e.g., of lakes, coastlines and coastal waters, dry land, etc. including their respective fauna, flora and habitats. Services consisting in studies on the interrelationship between environmental and climate (e.g., greenhouse effect), including natural disaster assessment and abatement services. Landscape protection services not elsewhere classified. Excludes forest and damage assessment and abatement services; and
- ▶ *Other environmental services not elsewhere classified (CPC 9409):* e.g., acid rain monitoring, controlling and damage assessment services.

Exclusive Rights - The authority to exclude foreigners from certain types of contract work.

Horizontal Commitment - Commitment that applies to international trade in multiple service sectors. Typically, horizontal commitments constitute limitations on market access or national treatment.

Juridical Person - Any legal entity duly constituted or otherwise organized under applicable law, whether for profit or otherwise and whether privately- or governmentally-owned; includes corporations, trusts, partnerships, joint ventures, sole proprietorship, or associations (branches and representative offices are not included).

Measure - A law, regulation, rule, procedure, decision, or administrative action that affects trade in services. Measures may pertain to: (1) the purchase, payment, or use of a service; (2) a service suppliers' access to, and use of, services which are required to be available to the general public; and (3) a service supplier's ability to establish a presence, including a commercial presence, in a host country.

Member Countries - Those countries who are signatories to the World Trade Organization and thus, the GATS.

Modes of Service Delivery:

- ▶ *Cross-border trade in services (Mode 1)* - Trade takes place from the territory of one member into that of another without the movement of the service provider, e.g. engineering plans sent by wire or satellite.
- ▶ *Consumption Abroad (Mode 2)* - Services consumed or purchased by nationals of a member in the territory of another member where the service is supplied, e.g. tourism, where the consumer travels to another country to consume a service.
- ▶ *Commercial presence (Mode 3)* - Any type of business or professional establishment, including branches and representative offices, e.g. direct investment in the host country.
- ▶ *Temporary movement of a natural person (Mode 4)* - Temporary presence of natural persons in a market for the purposes of supplying services, e.g. professionals, employees of service providers.

Most-favoured Nation Treatment - A service or service supplier from a WTO Member country must be treated as favourably as a service or service supplier from any other country.

National Treatment - Foreign services and service providers must be treated no less favourably than their domestic counterparts.

Natural Person - An individual who is a national of a country under the law of that country, or in the case of a country which does not have nationals (e.g. territories), an individual who has the right of permanent residence under the law of that country.

Organizational Form - The structure of a company i.e. incorporated, partnership, etc.

Technically Infeasible - Not possible because technology does not permit it.

Unbound - Describes a situation where a WTO Member wishes to remain able to introduce or maintain measures inconsistent with market access and national treatment obligations.

ANNEX B:

SUMMARY OF GATS COMMITMENTS RELATED TO ENVIRONMENTAL SERVICES

This annex summarizes the commitments and restrictions (related to the environmental services) made by WTO Members. The first section examines the horizontal restrictions that apply to all sectors (including environmental services) while the second section includes details about the environmental services sector-specific commitments. Taken together these commitments represent the starting point for GATS 2000 negotiations. For reasons of presentation, the examination of sector-specific commitments are grouped by regions and limited to Canada's major trading partners. Complete information on all WTO Members commitments is available by request or from our website at <http://services2000.ic.gc.ca>. A glossary of the terminology used in this section can be found in Annex A.

HORIZONTAL RESTRICTIONS

These restrictions generally summarize broad measures affecting commercial presence and investment, real estate transactions restrictions, government subsidies or taxation, and temporary movement of natural persons. In addition, several countries identify markets which may be subject exclusive rights or monopolies. For example, in all EC member states services considered as public utilities at a national or local level may be subject to public monopolies or to exclusive rights granted to private operators. The horizontal commitments supersede any sector specific commitments. To assess the full extend of trade liberalization, horizontal commitments have to be examined in conjunction with the sector-specific commitments.

1. Commercial Presence and Investment Restrictions

The acquisition and control of a domestic business by a foreigner may be subject to investment ceilings, restrictions as to the type of assets that may be held, local incorporation and presence requirements, and government approval. For example, Canada requires approval for all direct acquisitions of Canadian businesses with assets equal to or higher than a monetary amount established annually and published in February of each year in the Canada Gazette. In 1998 the threshold was C\$179 million for WTO Members. In addition, several countries require that the majority of staff be locally hired.

2. Real Estate Transactions Restrictions

Many countries restrict the purchases of real estate and the acquisition of land. Nationality restrictions and deposit requirement are relatively common. Often these regulations are established by sub-federal levels of government and as a result tend to be extremely complicated. Rather than impose restrictions on domestic real estate regulations, the GATS rules require transparency and access to information about these rules.

3. Government Subsidies or Taxation

To clarify issues related to domestic taxation and access to subsidies, Members provided specific comments in their schedules on this issue. Foreigners may not be eligible for certain subsidies or may, under special circumstances, have to pay a different tax rate. For example, the US reserves the right to impose higher taxes on a national, resident or corporation of a foreign country where a national, resident or corporation of the US is being subject to discriminatory or extraterritorial taxes. All countries maintain sovereignty over domestic issues of taxation and subsidization,

4. Movement of Natural Persons

Generally, the GATS does not prevent a Member from applying measures to regulate the entry of natural persons into, or their temporary stay in, its territory. The movement of natural persons is unbound under most GATS schedules. However, many Members generally committed to allowing temporary entry for measures concerning intra-corporate transferees (managers, executives and specialists), personnel engaged in the establishment of a business, and service salespersons. Permanent entry is not dealt with in the GATS and remains under the authority of local immigration authorities.

ENVIRONMENTAL SERVICES SECTOR-SPECIFIC COMMITMENTS

This section outlines the sector-specific commitments and limitations to market access and national treatment established in the individual country schedules. In total 50 countries provided schedules for environmental services but the level of commitments varies significantly by region and country. For reasons of presentation, the countries are grouped by region and limited to Canada's major trading partners.

North America

(The terms of access provided by both the US and Mexico in the GATS are not as liberal as those provided in the North American Free Trade Agreement.)

United States

- ▶ The US made commitments in all sub-sector of environmental services including other environmental services: (a) cleaning services of exhaust gases; (b) noise abatement services; (c) nature and landscape protection services; and (d) other environmental services not elsewhere classified.
- ▶ In each of these sub-sectors, US commitments are limited to the following activities: (a) implementation and installation of new or existing environmental cleanup, remediation, prevention and monitoring services; (b) implementation of environmental quality control and pollution reduction services; (c) maintenance and repair of environment-related systems and facilities not already covered by the US commitments on maintenance and repair of equipment; (d)

- on-site environmental investigation, evaluation, and monitoring; (e) sample collection services; (f) training on site or at the facility; and (g) consulting related to these areas.
- ▶ Nothing in this offer related to transportation should be construed to supersede the existing US commitments on transportation or related MFN exemptions.
- ▶ The US has no limitations to their commitments except that market access for the presence of natural persons is unbound except as indicated in the horizontal section.

South and Central America

- ▶ Countries with commitments in environmental services: *Columbia, Ecuador, El Salvador, Gambia, and Panama.*
- ▶ Columbia made commitments in natural and landscape protection and other environmental protection services not elsewhere classified.
- ▶ Ecuador made commitments in all sub-sectors of environmental service including other environmental services.
- ▶ El Salvador made commitments only in other environmental services.
- ▶ Gambia made commitments in sewage and refuse disposal services.
- ▶ Panama made commitments in cleaning of exhaust gases, noise abatement, and nature and landscape protection services.
- ▶ Other than El Salvador, the South and Central American countries have relatively unrestricted commitments; the only limitation is that the presence of natural persons remains unbound, except as indicated in the horizontal commitments.
- ▶ El Salvador remains unbound with respect to cross-border supply, consumption abroad, and the presence of natural persons. Market access is limited to those who apply to the municipal authorities for the concession or licence to provide refuse disposal services; applicants must be domiciled in El Salvador. National Treatment of commercial presences remains unbound.

European Community

- ▶ Countries with commitments in environmental services include: *Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.*
- ▶ These countries made commitments in sewage, refuse disposal and sanitation and similar services. Commitments in other environmental services are limited to the following sub-sectors: cleaning services of exhaust gases, nature and landscape protection services, and other environmental protection services not elsewhere classified.
- ▶ The cross-border supply of these services remains unbound because it is not technically feasible.
- ▶ The only other limitation is that the presence of natural persons remains unbound except as specified in the horizontal section.

Other European Countries (including eastern Europe)

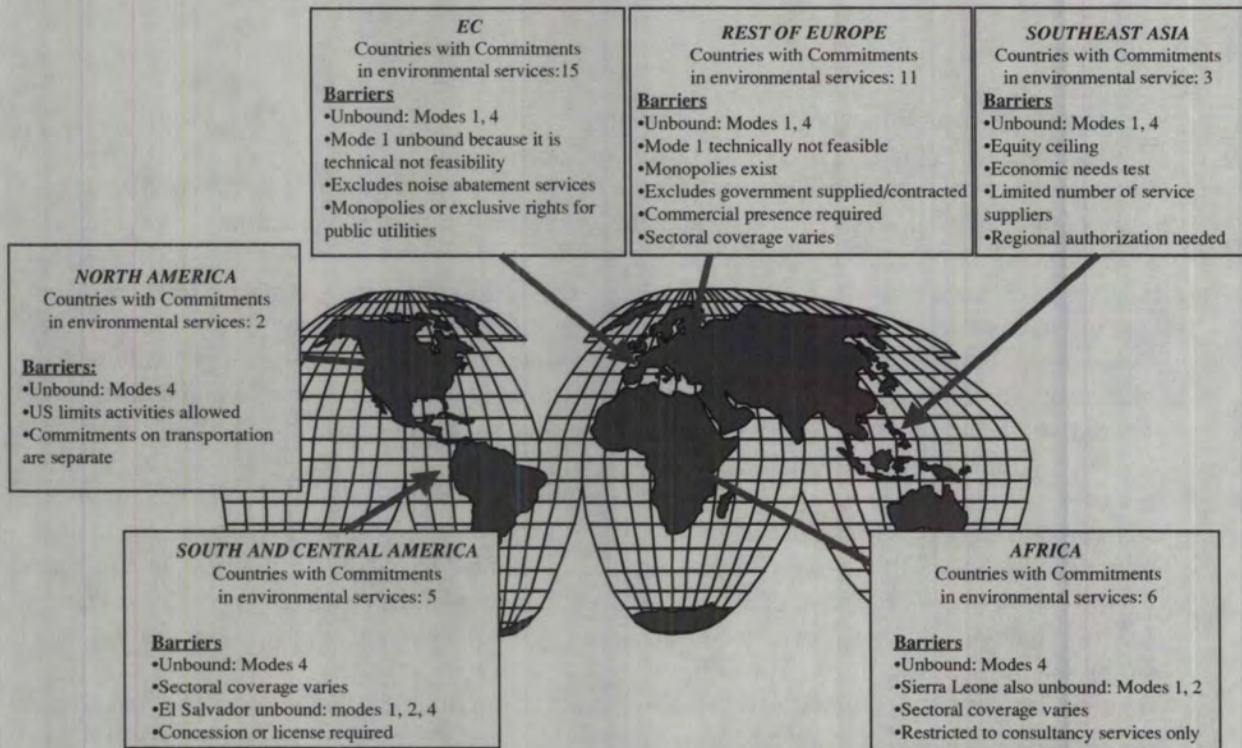
- ▶ Countries with commitments in environmental services: *Bulgaria, Czech Republic, Hungary, Iceland, Liechtenstein, Norway, Poland, Romania, Slovak Republic, Slovenia, and Switzerland.*
- ▶ Switzerland, Iceland, Norway, and Liechtenstein made commitments in all sub-sectors of environmental services.
- ▶ Bulgaria made commitments in all sub-sectors except other environmental protection services.
- ▶ The Czech Republic, Slovenia, and the Slovak Republic made commitments in sewage, refuse, and sanitation and similar services.
- ▶ Hungary made commitments in refuse disposal services and sanitation and similar services.
- ▶ Poland made commitments monitoring of environments, consultancy related to environmental protection, cleaning of exhaust gases, and noise abatement.
- ▶ Romania made commitments in all other environmental services: cleaning of exhaust gases; noise abatement; nature and landscape protection; and other environmental protection services not elsewhere classified.
- ▶ Bulgaria, Switzerland, Slovenia, Liechtenstein, and Iceland remain unbound with respect to the cross-border supply of environmental services due to lack of technical feasibility. These countries also remain unbound with respect to the presence of natural persons, except as indicated in the horizontal section.
- ▶ Norway, the Slovak Republic, and the Czech Republic remain unbound with respect to the cross-border supply of environmental services. The presence of natural persons is also unbound except as indicated in the horizontal commitments.
- ▶ In Poland, Hungary, and Romania, the only limitations are that the presence of natural persons is unbound except as indicated in the horizontal section.
- ▶ In Bulgaria, the commitments do not include environmental services supplied in the exercise of governmental authority (i.e. regulatory, administrative and control services by government and municipal bodies). The commitments do not apply to services related to the collection, transportation, storage, secondary use, recycling, restoration, use in the production of energy and materials, and disposal of dangerous waste, refuse and substances.
- ▶ In Slovenia, public utility exists but concession rights can be granted to the private operators established in the Republic of Slovenia.
- ▶ In Norway, Switzerland, and Liechtenstein, the commitments do not include public service functions whether owned and operated or contracted out by local, regional or central governments.
- ▶ In Switzerland, commercial presence is required for refuse disposal services. Also, Switzerland remains unbound with respect to commercial presence for garbage dumps.
- ▶ In Norway, for some categories of waste disposal there exists a monopoly situation. There is also a government owned monopoly for control services of exhaust-gas from cars and trucks and such services must be offered on a non-profit basis.

- ▶ In Liechtenstein, commercial presence is required for refuse disposal and sanitation and similar services. Liechtenstein remains unbound with respect to commercial presence for garbage dumps.

Asia-Pacific

- ▶ Countries with commitments in environmental services: *Japan, Korea, and Thailand.*
- ▶ Thailand and Japan made commitments in all sub-sectors.
- ▶ Korea has limited its commitments to refuse water disposal, industrial refuse disposal, cleaning services of exhaust gases and noise abatement services (other than construction work services), and environmental impact assessment services.
- ▶ Japan remains unbound with respect to the cross-border supply of environmental services due to lack of technical feasibility. No limitations are placed on the national treatment of commercial presence except those indicated in the horizontal commitments. Japan also remains unbound with respect to the presence of natural persons except as indicated in the horizontal commitments. In addition, the number of licences conferred to service suppliers of waste oil disposal at sea from vessels may be limited.
- ▶ In Korea, the presence of natural persons remains unbound except as indicated in the horizontal section. Market access for refuse and refuse water services supplied across borders also remains unbound. The number of sewage service suppliers is limited to twenty-five. For industrial refuse disposal services establishment of a commercial presence is subject to an economic needs test. Refuse collection and transport service suppliers may conduct business only in the jurisdiction authorized by the respective Regional Environment Office.
- ▶ Thailand separated its commitments into three types of environmental services. The first type includes environmental consultancy on sewage systems, refuse disposal, hazardous waste management, air pollution and noise management, sanitation and other environmental management services. The second type involves environmental protection and environmental abatement services. The third type includes the supply of sewage services (including industrial waste water treatment systems), refuse disposal (including hazardous waste management and incineration), sanitation and similar services, and other environmental services. All three types have to following limitations on commitments: (a) market access for natural persons is limited as indicated in the horizontal section; (b) national treatment for commercial presence is provided as long as foreign equity does not exceed 49%; and (c) there are limitations on commercial presence as indicated in the horizontal section. In addition, Thailand remains unbound with respect to the cross-border supply of the third type of services.

Figure 6:
ENVIRONMENTAL SERVICES
Limitations to GATS Commitment



Modes: (1) Cross-border, (2) Consumption abroad, (3) Commercial presence, (4) Presence of natural persons.

Table 2:
COUNTRIES WITH GATS COMMITMENTS IN ENVIRONMENTAL SERVICES

COUNTRY	Sewage Services	Refuse Disposal Services	Sanitation and Similar Services	Other Environmental Services			
				Cleaning of exhaust gases services	Noise abatement services	Nature and landscape protection services	Other environmental protection services
Australia	x	x	x				
Bulgaria	x	x	x	x	x	x	
Canada	x	x	x	x	x	x	x
Central African Republic							x
Colombia						x	x
Czech Republic	x	x	x				
Ecuador	x	x	x	x	x	x	x
El Salvador				x	x	x	x
European Community	x	x	x	x		x	x
Gambia	x		x				
Guinea	x		x				
Hungary		x	x				
Iceland	x	x	x	x	x	x	x
Israel	x	x	x	x	x		
Japan	x	x	x	x	x	x	x
Korea RP	x	x		x	x	x	x
Kuwait	x	x	x				
Lesotho	x	x	x	x	x	x	
Liechtenstein	x	x	x	x	x	x	x
Morocco	x	x	x	x	x	x	x
New Caledonia		x					
Norway	x	x	x	x	x	x	x

Panama				x	x	x	
Poland				x	x		
Qatar	x	x	x	x	x	x	x
Romania				x	x	x	x
Rwanda			x				
Sierra Leone	x	x	x	x	x	x	x
Slovak Republic	x	x	x				
Slovenia	x	x	x			x	
South Africa	x	x	x	x	x	x	
Switzerland	x	x	x	x	x	x	x
Thailand	x	x	x	x	x	x	x
Turkey	x	x	x				
United Arab Emirates	x	x	x	x	x	x	x
United States	x	x	x	x	x	x	x

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