

Centre for Aerospace & Defence Laws (CADL) Directorate of Distance Education NALSAR University of Law, Hyderabad

Course Material

M.A. (SPACE AND TELECOMMUNICATION LAWS)

2.3.11. Trade Laws Relating to Space and Telecommunications

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MODULE-I

INTRODUCTION TO INTERNATIONAL TRADE LAWS

INTRODUCTION TO INTERNATIONAL TRADE LAW

International trade is mainly concerned with the economic exchanges or trade relations occurring worldwide. International trade law includes the appropriate rules and customs for handling trade between countries or between private companies across borders. It concentrates on the challenges and prospects of global trade. International trade is basically exchange of goods, services etc. across international borders or territories. Over the past two decades it has become one of the fastest growing areas of international law.

Definitions of International Trade Law

It can be defined as the economic activity of buying and selling where the transaction crosses a border or cross border transaction. So it is basically cross border sale of goods. Now the cross-border sale of goods is not limited to the role of commodities or manufactured goods, it also includes services or may involve the movement of capital from one state to another through loans or investment. Hence international trade is concerned with the movement of goods, services, capital and in some circumstances labor across the borders.

Prof. Schwarzenberger defines it as "a branch of public international law that encompassed such matters as the ownership and exploitation of natural resources, the production and distribution of goods, invisible economic and financial transactions and currency and finance."

General Issues

Tariff Regulations, Cross-border transactions including movement of services, Capital and Labor. Subsidies, Anti-Dumping.

Institutions

International Trade law is developed and regulated by various institutions with specific objectives of combating the aforementioned general issues. These institutions include ITO, GATT, and WTO.

International Financial and Development Law

International Financial Law considers the role of central banks including regional banks in international economic relations and the development of economic and monetary policy. This is achieved through institutional mechanisms such as International Monetary Fund (IMF), Organization for Economic Co-operation and Development (OECD) etc. The general issues that are covered in International Financial Law are balance of payment, foreign exchange, inflation, etc.

International Development Law on the other hand aims to promote social and economic development through program and financial assistance to developing countries. This is achieved through institutional mechanisms such as:

- The World Bank Group: The World Bank comprises of the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA) and International Centre for Settlement of Investment Disputes (ICSID) that offers loans, advice, and other resources to over 100 developing countries.
- Regional Development Banks: Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), Islamic Development Bank (IDB), United Nations Regional Cooperation for Development.
- UN & its Initiative on Global Development: Group of 77 (G-77), United Nations Conference on Trade and Development [UNCTAD], United Nations Industrial Development Organization (UNIDO).

BASIC PRINCIPLES AND CONCEPTS OF INTERNATIONAL TRADE LAW

Influences on International Trade Law

Like any field of law, International Trade Law is also influenced by various walks of human life. The most prominent influences on International Trade Law are:

- Economic principles
- Political principles
- Principles of public international trade law
- Principles of private transnational trade law
- Principles of national foreign trade legislations and regulation

Basic Principles of International Trade Law under the WTO System

The WTO establishes a framework for trade policies; it does not define or specify outcomes. That is, it is concerned with setting the rules of the trade policy game, not with the results of the game. Five principles are of particular importance in understanding both the pre-1994 GATT and the WTO: non-discrimination, reciprocity, enforceable commitments, transparency, and safety valves.

Non-discrimination

Non-discrimination has two major components: the most-favoured-nation (MFN) rule, and the national treatment principle. Both are embedded in the main WTO rules on goods, services, and intellectual property, but their precise scope and nature differ across these three areas. This is especially true of the national treatment principle, which is a specific, not a general commitment when it comes to services.

MFN helps enforce multilateral rules by raising the costs to a country of defecting from the trade regime to which it committed itself in an earlier multilateral trade negotiation. If the country desires to raise trade barriers, it must apply the changed regime to all WTO members. This increases the political cost of backsliding on trade policy because importers will object. Finally, MFN reduces negotiating costs: once a negotiation has been concluded with a country, the results extend to all. Other countries do not need to negotiate to obtain similar treatment; instead, negotiations can be limited to principal suppliers.

National treatment ensures that liberalization commitments are not offset through the imposition of domestic taxes and similar measures. The requirement that foreign products be treated no less favourably than competing domestically produced products gives foreign suppliers greater certainty regarding the regulatory environment in which they must operate. The national treatment principle has often been invoked in dispute settlement cases brought to the GATT. It is a very wide-ranging rule: the obligation applies whether or not a specific tariff commitment was made, and it covers taxes and other policies, which must be applied in a non-discriminatory fashion to like domestic and foreign products. It is also irrelevant whether a policy hurts an exporter. What matters is the existence of discrimination, not its effects.

Reciprocity

Reciprocity is a fundamental element of the negotiating process. It reflects both a desire to limit the scope for free-riding that may arise because of the MFN rule and a desire to obtain "payment" for trade liberalization in the form of better access to foreign markets. A rationale for reciprocity can be found in the political-economy literature. The costs of liberalization generally are concentrated in specific industries, which often will be well organized and opposed to reductions in protection. Benefits, although in the aggregate usually greater than costs, accrue to a much larger set of agents, who thus do not have a great individual incentive to organize themselves politically. In such a setting, being able to point to reciprocal, sector-specific export gains may help to sell the liberalization politically. Obtaining a reduction in foreign import barriers as a quid pro quo for a reduction in domestic trade restrictions gives specific export-oriented domestic interests that will gain from liberalization an incentive to support it in domestic political markets. A related point is that for a nation to negotiate, it is necessary that the gain from doing so be greater than the gain available from unilateral liberalization. Reciprocal concessions ensure that such gains will materialize.

Binding and Enforceable Commitments

Liberalization commitments and agreements to abide by certain rules of the game have little value if they cannot be enforced. The non-discrimination principle, embodied in Articles I (on MFN) and III (on national treatment) of the GATT, is important in ensuring that market access commitments are implemented and maintained. Other GATT articles play a supporting role, including Article II (on schedules of concessions). The tariff commitments made by WTO members in a multilateral trade negotiation and on accession are enumerated in schedules (lists) of concessions. These schedules establish "ceiling bindings": the member

concerned cannot raise tariffs above bound levels without negotiating compensation with the principal suppliers of the products concerned. The MFN rule then ensures that such compensation—usually, reductions in other tariffs—extends to all WTO members, raising the cost of reneging.

Once tariff commitments are bound, it is important that there be no resort to other, nontariff, measures that have the effect of nullifying or impairing the value of the tariff concession. A number of GATT articles attempt to ensure that this does not occur. They include Article VII (customs valuation), Article XI, which prohibits quantitative restrictions on imports and exports, and the Agreement on Subsidies and Countervailing Measures, which outlaws export subsidies for manufactures and allows for the countervailing of production subsidies on imports that materially injure domestic competitors.

If a country perceives that actions taken by another government have the effect of nullifying or impairing negotiated market access commitments or the disciplines of the WTO, it may bring this situation to the attention of the government involved and ask that the policy be changed. If satisfaction is not obtained, the complaining country may invoke WTO dispute settlement procedures, which involve the establishment of panels of impartial experts charged with determining whether a contested measure violates the WTO. Because the WTO is an intergovernmental agreement, private parties do not have legal standing before the WTO's dispute settlement body; only governments have the right to bring cases. The existence of dispute settlement procedures precludes the use of unilateral retaliation. For small countries, in particular, recourse to a multilateral body is vital, as unilateral actions would be ineffective and thus would not be credible. More generally, small countries have a great stake in a rule-based international system, which reduces the likelihood of being confronted with bilateral pressure from large trading powers to change policies that are not to their liking.

Transparency

Enforcement of commitments requires access to information on the trade regimes that are maintained by members. The agreements administered by the WTO therefore incorporate mechanisms designed to facilitate communication between WTO members on issues. Numerous specialized committees, working parties, working groups, and councils meet regularly in Geneva. These interactions allow for the exchange of information and views and permit potential conflicts to be defused efficiently.

Transparency is a basic pillar of the WTO, and it is a legal obligation, embedded in Article X of the GATT and Article III of the GATS.WTO members are required to publish their trade regulations, to establish and maintain institutions allowing for the review of administrative decisions affecting trade, to respond to requests for information by other members, and to notify changes in trade policies to the WTO. These internal transparency requirements are supplemented by multilateral surveillance of trade policies by WTO members, facilitated by periodic country-specific reports (trade policy reviews) that are prepared by the secretariat and discussed by the WTO General Council. The external surveillance also fosters transparency, both for citizens of the countries concerned and for trading partners. It reduces

the scope for countries to circumvent their obligations, thereby reducing uncertainty regarding the prevailing policy stance.

Transparency has a number of important benefits. It reduces the pressure on the dispute settlement system, as measures can be discussed in the appropriate WTO body. Frequently, such discussions can address perceptions by a member that a specific policy violates the WTO; many potential disputes are defused in informal meetings in Geneva. Transparency is also vital for ensuring "ownership" of the WTO as an institution—if citizens do not know what the organization does, its legitimacy will be eroded. The trade policy reviews are a unique source of information that can be used by civil society to assess the implications of the overall trade policies that are pursued by their governments. From an economic perspective, transparency can also help reduce uncertainty related to trade policy. Such uncertainty is associated with lower investment and growth rates and with a shift in resources toward non-tradable (Francois 1997). Mechanisms to improve transparency can help lower perceptions of risk by reducing uncertainty. WTO membership itself, with the associated commitments on trade policies that are subject to binding dispute settlement, can also have this effect.

Safety Valves

A final principle embodied in the WTO is that, in specific circumstances, governments should be able to restrict trade. There are three types of provisions in this connection: (a) articles allowing for the use of trade measures to attain noneconomic objectives; (b) articles aimed at ensuring "fair competition"; and (c) provisions permitting intervention in trade for economic reasons. Category (a) includes provisions allowing for policies to protect public health or national security and to protect industries that are seriously injured by competition from imports.

The underlying idea in the latter case is that governments should have the right to step in when competition becomes so vigorous as to injure domestic competitors. Although it is not explicitly mentioned in the relevant WTO agreement, the underlying rationale for intervention is that such competition causes political and social problems associated with the need for the industry to adjust to changed circumstances. Measures in category (b) include the right to impose countervailing duties on imports that have been subsidized and antidumping duties on imports that have been dumped (sold at a price below that charged in the home market). Finally, under category (c) there are provisions allowing actions to be taken in case of serious balance of payments difficulties or if a government desires to support an infant industry.

P.S.N.R and Non-Intervention in Domestic Affairs

The principle of Permanent Sovereignty over Natural Resources recognizes the inalienable right of all States to freely dispose of their natural wealth and resources in accordance with their national interests, and on respect for the economic independence of States. It commenced as a 'political claim' of the states formerly designated as 'underdeveloped countries' and the new ex-colonial countries who demanded the recognition of their right to

participate in the development of their natural resources and the benefits accruing from their exploitation.

Soft Law Development

General Assembly Resolution 523 (VI), 1952 "Integrated Economic Development and Commercial Agreements" – This was the first instrument which recognized the right of the developing countries to independently manage their natural resources.

General Assembly Resolution 626 (VII), 1952 "Right to Explore Freely Natural Wealth and Resources" – This resolution was adopted after a draft proposed by Uruguay, which by that time had a very good reputation as a country.

General Assembly Resolution 1314 (XIII), 1958 "Recommendations Concerning International Respect for the Rights of Peoples and Nations to Self-determination" – This resolution stipulated, the Permanent Sovereignty over Natural Resources as a part of the right to Self-determination. This was a very important instrument, since it established the Commission on Permanent Sovereignty over Natural Resources which undertook preliminary studies and surveys of the position of the PNRS which culminated in the adoption of the General Assembly Resolution 1803 (XVII), 1962 "Declaration on Permanent Sovereignty over Natural Resources".

General Assembly Resolution 1803 (XVII), 1962 "Declaration on Permanent Sovereignty over Natural Resources" – This Resolution was adopted by a wide majority of the Member States. It has been considered also as the most important resolution that comprises a turning point for the PSNR.

This resolution took into consideration that it is desirable to promote international cooperation for the economic development of developing countries, and that economic and financial agreements between the developed and the developing countries must be based on the principles of equality and of the right of peoples and nations to self-determination.

It declared that the right of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised in the interest of their national development and of the well-being of the people of the State concerned.

It declared on the one hand the inviolable exercise of the right to PSNR and also the right to nationalize or expropriate on the grounds of "public utility, security or the national interest". On the other hand it lays down the legal obligation for the payment of "appropriate compensation" according to International Law and in the event of conflict it established the possibility of agreement between the States for settlement through arbitration or international adjudication.

Violation of the rights of peoples and nations to sovereignty over their natural wealth and resources is contrary to the spirit and principles of the Charter of the United Nations and hinders the development of international co-operation and the maintenance of peace.

MFN: Its Origin and Application in GATT and WTO

Bilateral and regional investment/ trade agreements have proliferated in the last decade and new agreements are still being negotiated. Most-Favoured-Nation (MFN) clauses, through the WTO system, link investment agreements by ensuring that the parties to one treaty provide treatment no less favourable than the treatment they provide under other treaties in areas covered by the clause. MFN clauses have thus become a significant instrument of economic liberalisation in the investment area.

Moreover, by giving the investors of all the parties benefiting from a country's MFN clause the right, in similar circumstances, to treatment no less favourable than a country's closest or most influential partners can negotiate on the matters the clause covers, MFN avoids economic distortions that would occur through more selective country-by-country liberalisation. Such a treatment may result from the implementation of treaties, legislative or administrative acts of the country and also by mere practice.

The present article provides a factual survey of jurisprudence and related literature on MFN treaty clauses in investment agreements with a view to contributing a better understanding of the MFN interfaces between such agreements.

Meaning and Definition

Under the WTO agreements, countries cannot normally discriminate between their trading partners. Once a special favour (such as a lower customs duty rate for one of their products) is granted to one member-country, the same has to be granted to all other WTO members. This principle is known as most-favoured-nation (MFN) treatment. Article 5 of the ILC Draft Articles on Most Favoured Nation Clauses 1978 defines most favoured nation treatment as "treatment accorded by the granting State to the beneficiary State, or to persons or things in a determined relationship with that State, not less favourable than treatment extended by the granting State to a third State or to persons or things in the same relationship with that third State."

This principle is so important that it is the first article of the General Agreement on Tariffs and Trade (GATT), which governs trade in goods. MFN is also a priority in the General Agreement on Trade in Services (GATS) (Article 2) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) (Article 4), although in each agreement the principle is handled slightly differently. Together, those three agreements cover all three main areas of trade handled by the WTO.

Some exceptions are allowed. For example, countries can set up a free trade agreement that applies only to goods traded within the group — discriminating against goods from outside. Or they can give developing countries special access to their markets. Or a country can raise barriers against products that are considered to be traded unfairly from specific countries. And in services, countries are allowed, in limited circumstances, to discriminate. But the agreements only permit these exceptions under strict conditions. In general, MFN means that

every time a country lowers a trade barrier or opens up a market, it has to do so for the same goods or services from all its trading partners — whether rich or poor, weak or strong.

MFN Obligation in GATT

"Article I: General Most-Favoured-Nation Treatment

- 1. With respect to customs duties and charges of any kind imposed on or in connection with importation or exportation or imposed on the international transfer of payments for imports or exports, and with respect to the method of levying such duties and charges, and with respect to all rules and formalities in connection with importation and exportation, and with respect to all matters referred to in paragraphs 2 and 4 of Article III, any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.
- 2. The provisions of paragraph 1 of this Article shall not require the elimination of any preferences in respect of import duties or charges which do not exceed the levels provided for in paragraph 4 of this Article and which fall within the following descriptions:
 - a) Preferences in force exclusively between two or more of the territories listed in Annex A, subject to the conditions set forth therein;
 - b) Preferences in force exclusively between two or more territories which on July 1, 1939, were connected by common sovereignty or relations of protection or suzerainty and which are listed in Annexes B, C and D, subject to the conditions set forth therein;
 - c) Preferences in force exclusively between the United States of America and the Republic of Cuba;
 - d) Preferences in force exclusively between neighbouring countries listed in Annexes E and F.
- 3. The provisions of paragraph 1 shall not apply to preferences between the countries formerly a part of the Ottoman Empire and detached from it on July 24, 1923, provided such preferences are approved under paragraph 5(1), of Article XXV which shall be applied in this respect in the light of paragraph 1 of Article XXIX.
- 4. The margin of preference on any product in respect of which a preference is permitted under paragraph 2 of this Article but is not specifically set forth as a maximum margin of preference in the appropriate Schedule annexed to this Agreement shall not exceed:
 - a) in respect of duties or charges on any product described in such Schedule, the difference between the most-favoured-nation and preferential rates provided for therein; if no preferential rate is provided for, the preferential rate shall for the purposes of this paragraph be taken to be that in force on April 10, 1947,

- and, if no most-favoured-nation rate is provided for, the margin shall not exceed the difference between the most-favoured-nation and preferential rates existing on April 10, 1947;
- b) In respect of duties or charges on any product not described in the appropriate Schedule, the difference between the most-favoured-nation and preferential rates existing on April 10, 1947.

In the case of the contracting parties named in Annex G, the date of April 10, 1947, referred to in subparagraph (a) and (b) of this paragraph shall be replaced by the respective dates set forth in that Annex."

Article III: National Treatment on Internal Taxation and Regulation

- 2. "The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products. Moreover, no contracting party shall otherwise apply internal taxes or other internal charges to imported or domestic products in a manner contrary to the principles set forth in paragraph 1.
- 4. The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use. The provisions of this paragraph shall not prevent the application of differential internal transportation charges which are based exclusively on the economic operation of the means of transport and not on the nationality of the product."

Paragraph 1 of Article III is the rule against protectionism.

1. "The contracting parties recognize that internal taxes and other internal charges, and laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products, and internal quantitative regulations requiring the mixture, processing or use of products in specified amounts or proportions, should not be applied to imported or domestic products so as to afford protection to domestic production."

Essential Requirements of Article I

Under Article I: 1 there are three questions that must be answered to determine whether there is a violation of the MFN treatment obligation of Article I: 1, namely:

i. Whether the measure at issue confers a trade "advantage" of the kind covered by ArticleI: 1?

- ii. Whether the products concerned are "like products"?
- iii. Whether the advantage at issue is granted "immediately and unconditionally" to all like products concerned?

Advantage

The MFN treatment obligation concerns "any advantage, favour, privilege or immunity" granted by any member to any product originating in, or destined for, any other country with respect to

- i. custom duties;
- ii. charges of any kind imposed on exportation or importation (e.g. import, surcharges or consular taxes);
- iii. charges of any kind imposed in connection with importation or exportation (e.g. customs fees or quality inspection fees);
- iv. charges imposed on the international transfer of payments for imports or exports;
- v. the method of levying such duties or charges, such as the method of assessing the base value on which the duty or charge is levied;
- vi. all rules and formalities in connection with importation and exportation;
- vii. internal taxes or other internal charges;
- viii. Laws, regulations and requirements affecting internal sale, offering for sale, purchase, transportation, distribution or use of any product.

Under Article I: 1, if advantages are granted to all other countries, including non-WTO members, then the member has to grant those advantages also to all WTO members. In other words, the MFN treatment obligation requires that any advantage granted by a member to any product from or for another country be granted to all like products from or for all other members. The Article I: 1 casts a very wide net and it is of very wide applicability.

Illustrative Cases

- In *US-MFN Footwear case*, also referred to as *US-Non Rubber Footwear case*, the Panel found: "the rules and formalities applicable to countervailing duties, including those applicable to the revocation of countervailing duty orders, are rules and formalities imposed in connection with importation, within the meaning of Article I:1".
- The Panel in *US-Customer User Fee case* stated: "The merchandise processing fee was a "charge imposed on or in connection with importation" within the meaning of Article I: 1. Exemptions from the fee fell within the category of "advantage, favour, privilege or immunity" which Article I: 1 required to be extended unconditionally to all other contracting parties".
- In *Canada-Autos case*, the Appellate Body usefully clarified the scope of Article I: 1 by ruling: "Article I: 1 requires that "any advantage, favour, privilege or immunity granted by any Member to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined

for the territories of all other members". The words of Article I:1 refer not to some advantages granted "with respect to" the subjects that fall within the defined scope of the Article, but to "any advantage"; not to some products, but to "any product"; and not to like products from some other Members, but to like products originating in or destined for "all other" Members."

• Similarly, in *EEC-Imports of Beef case*, the panel applied Article I: 1 to European Communities regulations making the suspension of an import levy conditional on the production of a certificate of authenticity.

Like Products

Article I: 1 concerns any product originating in or destined for any other country and requires that an advantage granted to such products shall be accorded to "like products" originating in or destined for the territories of all other members. It must be noted that it is only when the products are like, the MFN treatment obligation applies and that discrimination is prohibited. Products that are not like may be treated differently. The concept of like products is used in various Articles of GATT but it is nowhere defined in the GATT 1994. The dictionary meaning of "like products" suggests that like products are products that share a number of identical or similar characteristics. However, the Appellate Body noted in *Canada-Aircraft case* that the dictionary meanings leave many interpretative questions open. With regard to the concept of "like products", there are three questions of interpretation that need to be resolved:

- i. Which characteristics or qualities are important in assessing "likeness"?
- ii. To what degree or extent must products share qualities or characteristics in order to be "like products"?
- iii. From whose perspective should "likeness" be judged?

The Panel and Appellate Body have accepted that the concept of "like products" has different meaning in the different contexts in which it is used. In **Japan-Alcoholic Beverages II case**, the Appellate Body illustrated the possible differences in the scope of the concept of "like products" between different provisions of the WTO Agreement by evoking the image of an accordion. The Appellate Body said: "The accordion of "likeness" stretches and squeezes in different places as different provisions of the WTO Agreement are applied. The width of the accordion in any one of those places must be determined by the particular provision in which the term "like" is encountered as well as by the context and the circumstances that prevail in any given case to which that provision may apply".

The meaning of the phrase 'like products' in Article I: 1 was addressed in a number of GATT working party and panel reports. In *Spain-Unroasted Coffee case*, the Panel had to decide whether various types of unroasted coffee ("Colombian mild", 'other mild", "unwashed Arabica", "Robusta" and "other") were "like products" within the meaning of Article I:1. Spain did not apply custom duties on "Columbia mild" and "other mild"; while it imposed a

seven percent customs duty on the other three types of unroasted coffee. Brazil, which exported mainly "unwashed Arabica", claimed that the Spanish tariff regime was inconsistent with Article I: 1. in examining whether the various types of unroasted coffee were "like products" to which the MFN treatment obligation applied, the Panel considered:

- the characteristics of the products;
- their end-use and
- Tariff regime of other members.

The Panel examined all arguments that had been advanced during the proceedings for the justification of a different tariff treatment for various groups and types of unroasted coffee. It noted that these arguments mainly related to organoleptic differences resulting from geographical factors, cultivation methods, the processing of the bean, and the generic factor. The Panel did not consider that such differences were sufficient reason to allow for a different tariff treatment. It pointed out that it was not unusual in the case of agricultural products that the taste and aroma of the end product would differ because of one or several of the above mentioned factors. The Panel furthermore found relevant to its examination of the matter that unroasted coffee was mainly, if not exclusively, sold in the form of blends, combining various types of coffee, and that coffee in its end use, was universally regarded as a well-defined and single product intended for drinking. The Panel noted that no other contracting party applied its tariff regime in respect of unroasted, non-decaffeinated coffee in such a way that different types of coffee were subject to different tariff rates. In the light of the foregoing, the Panel concluded that unroasted, non-decaffeinated coffee beans listed in the Spanish Customs Tariff should be considered as "like products" within the meaning of Article I: 1. In addition to the three criteria used by the Panel in Spain-Unroasted coffee case, there is one more criteria that has assumed importance and that is consumers' tastes and habits.

Advantage Granted Immediately and Unconditionally

Article I: 1 requires that any advantage granted by a WTO member to imports from any country must be granted "immediately and unconditionally" to imports from all other WTO Members. Once a WTO Member has granted an advantage to imports from a country, it cannot make the granting of that advantage to imports of other WTO members conditional upon those other WTO Members. In a legal opinion of 1973 in the context of the accession of Hungary to the GATT, the GATT Secretariat noted that: "the prerequisite of having a cooperation contract in order to benefit from certain tariff treatment appeared to imply conditional most favoured nation treatment and would, therefore, not appear to be compatible with the General Agreement".

Illustrative Cases

• In *Indonesia-Autos case*, the Panel found with respect to the requirement under Article I:1 that advantages are granted "unconditionally and immediately", as follows: "under the February 1996 car programme the granting of customs duty benefits to parts and components is conditional to their being used in the assembly in Indonesia of a National

Car. The granting of tax benefits is conditional and limited to the only pioneer company producing National Cars. And there is also a third condition for these benefits: the meaning of certain local content targets. Indeed under all these car programmes, custom duty and tax benefits are conditional on achieving a certain local content value for the finished car. The existence of these conditions is inconsistent with the provisions of Article I: 1 which provides that tax and custom duty advantages accorded to products of one Member (here on Korean products) be accorded to import like products from other Members "immediately and unconditionally"."

- In *Canada-Autos case*, the Appellate Body also discussed the concepts of "immediately and unconditionally", and found: "The measures maintained by Canada accords the import duty exemption to certain motor vehicles entering Canada from certain countries. These privileged motor vehicles are imported by a limited number of designated manufacturers who are required to meet certain performance conditions. In practice, this measure does not accord the same import duty exemption "immediately and unconditionally" to like motor vehicles of all other Members, as required under Article I: 1 of the GATT 1994. The advantage of the import duty exemption is accorded to like motor vehicles from all other Members. Accordingly, we find that this measure is not consistent with Canada's obligations under Article I: 1 of the GATT 1994".
- In the *Belgian–Family Allowances case*, a dispute of 1952 concerning a Belgian Law providing for an exemption from a levy on products purchased from countries which had a system of family allowances similar to that of Belgium, the Panel held that the Belgian law at issue introduced a discrimination between countries having a given system of family allowances and those which had a different system or no system at all, and made the granting of the exemption dependent on certain conditions. The panel concluded that the advantage the exemption from a levy-was not granted "unconditionally" and that the Belgian law was, therefore, inconsistent with the MFN treatment obligation of Article I:

Exceptions to the MFN Rule under GATT

Annex Countries

Preferences with respect to import duties or charges between/ among countries mentioned in Annexes A to F is permissible subject to the conditions contained in the annexes and the provisions of Article I: 4. the annexes are as follows:

- Annex A: List of territories referred to in Paragraph 2(a) of Article I: United Kingdom and dependent territories
- Annex B: List of territories of the French Union referred to in Paragraph 2(b) of Article I
- Annex C: List of territories referred to in Paragraph 2(b) of Article I as respects the customs union of Belgium, Luxemburg and the Netherlands
- Annex D: List of territories referred to in Paragraph 2(b) of Article I as respects the United States of America

- Annex E: List of territories covered by preferential arrangements between Chile and neighbouring countries referred to in Paragraph 2(d) of Article I
- Annex F: List of territories covered by preferential arrangements between Lebanon and Syria and neighbouring countries referred to in Paragraph 2(d) of Article I

General Exceptions (GATT Article XX)

Article XX of the GATT provides that the Members of the WTO are free to enforce any measure:

- a) necessary to protect public morals;
- b) necessary to protect human, animal or plant life or health;
- c) relating to the importations or exportations of gold or silver;
- d) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to customs enforcement, the enforcement of monopolies operated under paragraph 4 of Article II and Article XVII, the protection of patents, trademarks and copyrights, and the prevention of deceptive practices;
- e) relating to the products of prison labour;
- f) imposed for the protection of national treasures of artistic, historic or archaeological value:
- g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;
- h) undertaken in pursuance of obligations under any intergovernmental commodity agreement which conforms to criteria submitted to the CONTRACTING PARTIES and not disapproved by them or which is itself so submitted and not so disapproved;
- i) involving restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry during periods when the domestic price of such materials is held below the world price as part of a governmental stabilization plan; *Provided* that such restrictions shall not operate to increase the exports of or the protection afforded to such domestic industry, and shall not depart from the provisions of this Agreement relating to non-discrimination;
- j) essential to the acquisition or distribution of products in general or local short supply; Provided that any such measures shall be consistent with the principle that all contracting parties are entitled to an equitable share of the international supply of such products, and that any such measures, which are inconsistent with the other provisions of the Agreement shall be discontinued as soon as the conditions giving rise to them have ceased to exist.

The measures, however, should not "constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade."

Security Exceptions (GATT Article XXI)

Nothing in the Agreement shall be construed

- a) To require any contracting party to furnish any information the disclosure of which it considers contrary to its essential security interests; or
- b) To prevent any contracting party from taking any action which it considers necessary for the protection of its essential security interests
 - i. Relating to fissionable materials or the materials from which they are derived;
 - ii. Relating to the traffic in arms, ammunition and implements of war and to such traffic in other goods and materials as is carried on directly or indirectly for the purpose of supplying a military establishment;
 - iii. Taken in time of war or other emergency in international relations; or
- c) To prevent any contracting party from taking any action in pursuance of its obligations under the United Nations Charter for the maintenance of international peace and security.

Regional Integration (GATT Article XXIV)

Regional integration has a vast impact on the world economy today and is the subject of frequent debate in a variety of forums, including the WTO Committee on Regional Trade Agreements. Regional integration liberalizes trade among countries within the region, while allowing trade barriers with countries outside the region. Regional integration therefore may lead to results that are contrary to the Most-Favoured-Nation principle because countries inside and outside the region are treated differently. This may have a negative effect on countries outside the region, and thus lead to results contrary to the liberalization of trade. Therefore, GATT Article XXIV provides that regional integration may be allowed as an exception to the Most-Favoured-Nation rule only if the following conditions are met:

- i. First, tariffs and other barriers to trade must be eliminated with respect to substantially all trade within the region.
- ii. Second, the tariffs and other barriers to trade applied to outside countries must not be higher or more restrictive than they were prior to establishment of regional integration.

Generalized System of Preferences

The Generalized System of Preferences or "GSP" is a system that grants products originating in developing countries lower tariff rates than those normally enjoyed under Most-Favoured-Nation status as a special measure granted to developing countries in order to increase their export earnings and promote their development.

The GSP is defined in the Decision on "Generalized System of Preferences" of June 1971, and is a measure taken based on the Decision on "Differential and More Favourable Treatment, Reciprocity, and Fuller Participation of Developing Countries" or the "Enabling Clause." The GSP has the following characteristics:

- i. First, preferential tariffs may be applied not only to countries with special historical and political relationships (i.e. the British Commonwealth), but to developing countries more generally (thus the system is described as "generalized").
- ii. Second, the beneficiaries are limited to developing countries.
- iii. Third, it is a benefit unilaterally granted by developed countries to developing countries.

Non-Application of Multilateral Trade Agreements between Particular Member States (WTO Article XIII)

The Marrakesh Agreement Establishing the World Trade Organization (the "WTO Agreement") provides that "[t]his Agreement and the Multilateral Trade Agreement in Annexes 1 and 2 shall not apply as between any Member and any other Member," when either of the following conditions are met: (a) at the time the WTO went into force, Article XXXV of GATT 1947 had been invoked earlier and was effective as between original Members of the WTO which were contracting parties to GATT 1947 or; (b) between a Member and another Member which has acceded under Article XII only if the Member not consenting to the application has so notified the Ministerial Conference before the approval of the agreement on the terms of accession by the Ministerial Conference.

In the case of non-application, benefits enjoyed by other Members are not provided to the country of non-application, which leads to results that are contrary to the most-favoured-nation principle.

These Article XIII provisions were created to deal with problems arising from accessions. Ideally, the most-favoured-nation rule would be applied stringently so that when country B accedes to the Agreement, it is required to confer most-favoured-nation status on all other Members, and they, in turn, are required to confer most-favoured-nation status on country B. However, country A, which is already a Member of the WTO, may have reasons for not wanting to confer the rights and obligations of the WTO on new Member B. The WTO only requires the consent of two-thirds of the existing membership for accession, so it is conceivable that country A might, against its will, be forced to give most-favoured-nation status to country B. WTO Article XIII is a way to respect country A's wishes by preventing a WTO relationship from taking effect between countries A & B.

On the other hand, WTO Article XIII provides a way for the accession of country B, even if more than a third of the membership, like country A, has reasons for not wanting a WTO relationship with country B (in which case they will object to the accession itself) by allowing for non-application. In January 1995, the United States notified the General Council that it would not apply the Agreement and the Multilateral Trade Agreements in Annexes 1 and 2 to Romania, yet, in February 1997, the United States withdrew its invocation. In addition, the United States also notified that it would not apply the above-mentioned agreements to two other new Members: Mongolia and Kyrgyz Republic.

Other Exceptions

Other exceptions peculiar to the Most-Favoured-Nation principle include *Article XXIV: 3* regarding frontier traffic with adjacent countries, and *Article I: 2* regarding historical preferences which were in force at the signing of the GATT, such as the British Commonwealth.

It is also possible to obtain a *waiver* to constitute an exception to the Most-Favoured-Nation principle. Under WTO Article IX: 3, countries may, with the agreement of other contracting parties, waive their obligations under the agreement. New waivers, however, can only be obtained for exceptional circumstances, and require the consent of three-quarters of the contracting parties It is stipulated that the exceptional circumstances, the terms and conditions governing the application of the waiver, and the date on which the waiver will be terminated shall be clearly stated, and that waivers are subject to annual review (Article IX: 4).

MFN Obligation in GATS

"Article II: Most-Favoured-Nation Treatment

- With respect to any measure covered by this Agreement, each Member shall accord immediately and unconditionally to services and service suppliers of any other Member treatment no less favourable than that it accords to like services and service suppliers of any other country.
- 2. A Member may maintain a measure inconsistent with paragraph 1 provided that such a measure is listed in, and meets the conditions of, the Annex on Article II Exemptions.
- 3. The provisions of this Agreement shall not be so construed as to prevent any Member from conferring or according advantages to adjacent countries in order to facilitate exchanges limited to contiguous frontier zones of services that are both locally produced and consumed."

Article II of the GATS constitutes a general obligation which is, in principle, applicable across the board by all Members to all services sectors.

Essential Features of Article II

Any measure covered by this Agreement

The scope of the GATS is defined in Article I: 1 of the Agreement to encompass "measures by Members affecting trade in services". A closer look at the elements of this definition reveals the wide domain of the Agreement. First of all, the Agreement takes a view of "trade in services" that includes not only cross border supply, but also the supply of a service through consumption abroad, commercial presence and presence of natural persons. Hence, while the MFN obligation under GATT 1994 is concerned with measures affecting products per se, the domain of this obligation in the GATS includes also measures affecting service

suppliers. Secondly, "measures by Members" are defined broadly to include measures taken by central, regional or local governments, as well as non-governmental bodies in the exercise of powers delegated by the government - even though the GATS only requires Members to take "such reasonable measures as may be available to it" to ensure compliance by subcentral entities. Finally, the Bananas Case confirmed a broad interpretation of the term "affecting", i.e. measures concerned need not affect trade in services as such but could also be measures taken in other areas with repercussions on services - such as measures in respect of the purchase of goods.

Treatment no less favourable

The key issue here is whether this should be interpreted to mean only *de jure*, or formal, discrimination or whether it also pertains to *de facto* discrimination. The Appellate Body in the Bananas Dispute upheld the Panel's conclusion that the provision prohibits both forms of discrimination, but differed on the basis for this conclusion.

The Panel argued that the basic requirement to accord "treatment no less favourable" was the same in GATS Article II: 1 and GATS Article XVII: 1, the national treatment provision. The standard of "no less favourable treatment" in paragraph 1 of Article XVII was meant to provide for no less favourable conditions of competition regardless of whether this was achieved through the application of formally identical or formally different measures. Paragraphs 2 and 3 of Article XVII served the purpose of codifying this interpretation, established in previous jurisprudence pertaining to the GATT national treatment provision, and did not impose new obligations on Members additional to those contained in paragraph 1. The absence of similar elaboration in Article II was not a justification for giving a different ordinary meaning to the words "treatment no less favourable", which were identical in both Articles II:1 and XVII:1. It could be legitimately inferred, therefore, that Article II, also proscribed both forms of discrimination - notwithstanding the absence of clarifying elaboration.

The Appellate Body found the Panel's reasoning on this issue to be "less than fully satisfactory". It argued that the MFN obligation in GATS Article II should be interpreted, not in the light of the national treatment obligations in GATS Article XVII or GATT Article III, but in the light of the MFN obligation in GATT Article I. Article I of GATT 1994 had also been applied, in past practice, to measures involving *de facto* discrimination. Significantly, the Appellate Body agreed with the Panel that if Article II were to be interpreted to require only formally identical treatment, "it would not be difficult - and, indeed, it would be a good deal easier in the case of trade in services, than in the case of trade in goods - to devise discriminatory measures aimed at circumventing the basic purpose of that Article" which was to ensure equality of competitive opportunities. For these reasons, it concluded that "treatment no less favourable" in Article II: 1 of the GATS should be interpreted to include *de facto*, as well as *de jure*, discrimination. The Appellate Body went further than the Panel in clearly stating that its conclusion was not limited to the case under consideration.

Like services and service suppliers

In *the Bananas Case*, the question of how likeness of services and service suppliers should be established needed to be addressed to only a limited extent. First, and relatively straightforward, the Panel found that wholesale services of bananas are like, irrespective of the origin of the bananas supplied. Secondly, in the Panel's view, "to the extent that entities provide these like services, they are like service suppliers".

It is relatively straightforward to apply the MFN provision to measures taken by governments that are overtly discriminatory, i.e., those that discriminate on the basis of the provenance of the good. The problem arises in relation to what might be termed as apparently origin-neutral (AON) measures; namely, those where the basis for applying a measure is not the provenance of the service or service supplier but some other characteristic or set of characteristics, such as the place of training. In such cases, a determination under Article II hinges on determining whether the imported products are "like" each other. The wider the definition of "likeness," the greater will be the set of measures that are inconsistent with Article II. If a doctor is a doctor, a regulation which imposed greater qualification requirements on a doctor trained in Country A than on a doctor trained in Country B would violate Article II. On the other hand, the narrower the definition of "likeness" the more measures will conform to Article II. If a doctor trained in one country is not "like" a doctor trained in another country, then the treatment of the doctor trained in country A would have to be compared with the treatment of a doctor trained in a country with similar training standards, and the additional qualification requirement could then be found consistent with Article II. Similar questions also arise in establishing likeness of service suppliers.

Exceptions to the MFN Rule under GATS

Article II: 2 of the GATS: MFN Exceptions

Certain sectoral sensitivities that emerged in the Uruguay Round raised the spectre of wholesale sectoral exclusions from GATS as a means of avoiding the MFN rule. In order to prevent this, it was agreed to permit limited exemptions to MFN under GATS. Such exemptions, however, had to be taken at the time the negotiations were concluded. Any exception to this general obligation would have to be provided for explicitly in accordance with the terms of the GATS. Article II: 2 states:

"A Member may maintain a measure inconsistent with paragraph 1 provided that such a measure is listed in, and meets the conditions of, the Annex on Article II Exemptions".

The annex makes it clear that no new exemptions can be granted, at least by this route: any future requests to give non-MFN treatment can only be met through the WTO waiver procedures. Some listed exemptions are subject to a stated time limit. For those that are not, the annex provides that *in principle* they should not last longer than ten years (that is, not beyond 2004), and that in any case they are subject to negotiation in future trade-liberalizing rounds. Meanwhile, all remaining exemptions will be reviewed in the Council for Trade in Services before the end of 1999 to see whether they are still needed.

A limited exception to the rule that no new exemptions could be listed after the entry into force of the WTO applied to financial services, maritime transport and basic telecommunications: GATS annexes providing for continuing negotiations on these subjects, allowed exemptions to be listed only at the end of the negotiations. Now that negotiations in basic telecommunications and financial services have been concluded, it is only in maritime transport services that it is still possible to take an MFN exemption.

General Exceptions (Article XIV)

The GATS provisions on general and security exceptions resemble their GATT equivalents. The general exceptions are, as in the GATT, preceded by a head-note that makes the right of a member to adopt or enforce measures necessary for the purposes listed subject to the condition that they not be applied as a means of "arbitrary or unjustifiable discrimination between countries where like conditions prevail, or as a disguised restriction on trade in services". The list of purposes that follows includes the protection of public morals and maintenance of public order; protection of human, animal or plant life or health; securing compliance with laws or regulations which are not inconsistent with the provisions of GATS including those relating to the prevention of deceptive and fraudulent practices, the protection of individual privacy in the handling of personal data, and safety; ensuring equitable and effective taxation and the avoidance of double taxation. A footnote spells out a number of ways in which a country's taxation practices may treat foreigners differently from its own nationals.

Security Exceptions (Article XIV bis)

The security exceptions are virtually identical with those in GATT 1994.

Sectoral Annexes and Decisions

The Annex on Air Transport specifically excludes the complex network of bilateral agreements on air traffic rights from GATS rules. In consequence, the GATS applies at present only to aircraft repair and maintenance services, the selling and marketing of air transport services (a function defined as not including the pricing or conditions of transport services), and computer reservation systems.

In the maritime transport sector, the failure to conclude negotiations successfully led to the June 1996 Decision to suspend the application of the MFN obligation to the sector until the end of the next round of comprehensive services negotiations. The suspension was prompted by the difficulty in eliminating MFN-inconsistent measures in the maritime sector. Even though Members could have listed exemptions from the MFN obligations, the dominant view was that the continued suspension of the MFN obligation would avert the need for many countries to take MFN exemptions which may be more difficult to negotiate away once explicitly listed.

Regional Integration

Apart from services specified in individual MFN exemption lists, the only permitted departure from most-favoured-nation treatment under the GATS covers preferential treatment among countries that are members of regional trading arrangements. The GATS rules on "Economic Integration", in Article V, are modelled on those in Article XXIV of the GATT. Article V: 1 permits any WTO member to enter into an agreement to further liberalize trade in services with the other countries that are parties to the agreement, provided the agreement has "substantial sectoral coverage", eliminates measures that discriminate against service suppliers of other countries in the group, and prohibits new or more discriminatory measures. Recognizing that action to open up services markets may well form part of a wider process of economic integration, Article V: 2 allow the liberalization achieved to be judged in this light.

The drafting of these rules improves on their GATT equivalents in some respects: for instance, "substantial sectoral coverage" is more carefully defined, since it disqualifies agreements that exclude any of the four modes of supply. Some other provisions are carried over from Article XXIV with little change. An approved agreement must be designed to help trade among its members, and must not result in an increase in the overall barriers faced by non-members in trading with the group within the respective sectors or sub-sectors (Article V: 4). If the establishment of the agreement, or its subsequent enlargement, leads to the withdrawal of commitments made to non-members, there must be negotiations to provide appropriate compensation (Article V: 5). No compensation, on the other hand, is due from non-members for any trade benefits they may gain from the agreement (Article V:8).

Article V: 7 create a transparency obligation, requiring Members who are party to regional agreements to notify promptly any such agreement and any enlargement or significant modification to it. The agreements which have been notified so far include the agreements establishing NAFTA, the European Communities and their Member States, as well as their agreements with the Slovak Republic, Hungary, Poland, the Czech Republic, Romania, Norway, Iceland, Liechtenstein and Bulgaria, and agreements between Canada and Chile and between Australia and New Zealand.

A related exception from the MFN rule, for the movement of natural persons, is permitted by Article V *bis* of the GATS. This allows countries to take part in agreements which establish full integration of labour markets. The only such agreement notified so far is the one involving Denmark, Finland, Iceland, Norway and Sweden.

Monopolies and exclusive service suppliers

Article VIII requires each Member to ensure that any monopoly supplier of a service does not "in the supply of the monopoly service in the relevant market" act in a manner inconsistent with the MFN obligation and the Member's specific commitments. A monopoly supplier of a service is defined in the GATS as any person, public or private, which in the relevant market of the territory of a Member is authorized or established formally or in effect by that Member as the sole supplier of that service (Article XXVIII (h)).

Government Procurement

Article XIII of the GATS exempts government purchase of services for its own use from the MFN obligation (as well as from the market access and national treatment rules). However, the same provision mandates negotiations on government procurement in services which may lead to commitments to open up some government purchases to Foreign Service suppliers.

MFN Obligations in TRIPS

"Article IV: Most-Favoured-Nation Treatment"

With regard to the protection of intellectual property, any advantage, favour, privilege or immunity granted by a Member to the nationals of any other country shall be accorded immediately and unconditionally to the nationals of all other Members. Exempted from this obligation is any advantage, favour, privilege or immunity accorded by a Member:

- (a) deriving from international agreements on judicial assistance or law enforcement of a general nature and not particularly confined to the protection of intellectual property;
- (b) granted in accordance with the provisions of the Berne Convention (1971) or the Rome Convention authorizing that the treatment accorded be a function not of national treatment but of the treatment accorded in another country;
- (c) in respect of the rights of performers, producers of phonograms and broadcasting organizations not provided under this Agreement;
- (d) deriving from international agreements related to the protection of intellectual property which entered into force prior to the entry into force of the WTO Agreement, provided that such agreements are notified to the Council for TRIPS and do not constitute an arbitrary or unjustifiable discrimination against nationals of other Members."

The MFN principle requires each Member to treat nationals of all other Members on an equivalent basis in relation to intellectual property protection. The MFN principle was not traditionally incorporated in the WIPO Conventions. It was assumed that WIPO members would not grant intellectual property rights protection to foreign nationals more extensive than the protection granted to local nationals. In this setting, a national treatment obligation would place all foreigners on the same plane. As bilateral pressures mounted in the late 1980s to increase IPR protection, Uruguay Round negotiators became concerned that some countries were indeed granting IPR privileges to foreign nationals more extensive than the rights granted to their own nationals. This focused attention on incorporating an MFN principle in TRIPS, so that all Members would obtain an equivalent level of protection when more extensive protection was granted to foreigners.

The MFN principle in TRIPS is particularly important because of its relationship to regional integration arrangements. Article 4 was drafted in a manner that was intended to accommodate the interests of certain pre-existing regional arrangements. However, the legal formula used in Article 4 (d) to establish that accommodation is oddly suited to such a purpose. The regional arrangements affected by it have notified the Council for TRIPS of

potentially broad claims of exemption, though the effect of these claims in practice remains to be determined. Articles 3, 4 and 5 were not subject to the transition arrangements in favour of developing country and least developed country Members, and so became applicable to them on January 1, 1996.

Exceptions to the MFN Rule under TRIPS

Article IV provides for four exceptions to the MFN treatment under the TRIPS Agreement. The TRIPS, unlike GATT or GATS, does not contain any other provision on exemptions. This absence leads to particularly uncertain legal context with respect to the status of advantages that me exchanged between countries through bilateral trade agreements.

Judicial Assistance or Law Enforcement

Article IV (a) exempts any advantage, favour, privilege or immunity deriving from international agreements on judicial assistance or law enforcement of a general nature and not particularly confined to the protection of intellectual property.

Berne and Rome Convention

The second exception relates to any advantage, favour, privilege or immunity granted under the Berne Convention or Rome Convention.

Performers' Rights

Advantage, favour, privilege or immunity in respect of the rights of performers, producers of phonograms and broadcasting organizations not provided under TRIPS Agreement are also exempted from the MFN obligation.

International Arrangements

Article 4 (d) is with regard to the international agreements related to the protection of intellectual property. According to the exception given in Article 4 (d) countries are not required to extend the same advantage, favour, privilege or immunity to all member counties of the WTO in relation to intellectual property protection if these advantages, favours, privileges or immunities are derived from international agreements related to protection of intellectual property right. However, this is subject to four conditions.

- i. First, the relevant international agreement should have entered into force prior to the entry into force of the WTO agreement.
- ii. Second, the international agreement should be related to the protection of intellectual property.
- iii. Third, such agreements should have been notified to the TRIPS council.
- iv. Fourth, such agreements should not constitute arbitrary or unjustifiable discrimination against nationals of other countries.

In other words, this provision exempts those agreements related to the protection of intellectual property from the application of the MFN provision that were in existence when the WTO was formed.

National Treatment: Its Origin and Application in GATT and WTO

National treatment (GATT Article III) stands alongside MFN treatment as one of the central principles of the WTO Agreement. Under the national treatment rule, Members must not accord discriminatory treatment between imports and "like" domestic products (with the exception of the imposition of tariffs, which is a border measure). The GATS and the TRIPS Agreement have similar provisions. This rule prevents countries from taking discriminatory measures on imports and from offsetting the effects of tariffs through non-tariff measures. An example of the latter could be a case in which Member A reduces the import tariff on product X from ten percent to five percent, only to impose a five percent domestic consumption tax only on imported product X, effectively offsetting the five percentage point tariff cut. The purpose of the national treatment rule is to eliminate "hidden" domestic barriers to trade by WTO Members by according imported products treatment no less favorable than that accorded to products of national origin. Adherence to this principle is important in order to maintain a balance of rights and obligations, and is essential for the maintenance of the multilateral trading system.

Legal Framework

GATT Article III

GATT Article III requires that WTO Members provide national treatment to all other Members. Article III: 1 stipulates the general principle that Members must not apply internal taxes or other internal charges, laws, regulations, and requirements affecting imported or domestic products so as to afford protection to domestic production.

In relation to internal taxes or other internal charges, Article III:2 stipulates that WTO Members shall not apply standards higher than those imposed on domestic products between imported goods and "like" domestic goods, or between imported goods and "a directly competitive or substitutable product." With regard to internal regulations and laws, Article III: 4 provides that Members shall accord imported products treatment no less favourable than that accorded to "like products" of national origin.

In determining the similarity of "like products," GATT panel reports have relied on a number of criteria including tariff classifications, the product's end uses in a given market, consumer tastes and habits, and the product's properties, nature, and quality. WTO panels and the Appellate Body reports utilize the same criteria.

Exceptions to GATT Article III (National Treatment Rule)

Although national treatment is a basic principle under the GATT, the GATT provides for certain exceptions, outlined below

Government Procurement

GATT Article III: 8(a) permits governments to purchase domestic products preferentially, making government procurement one exception to the national treatment rule. This

exception is permitted because WTO Members recognize the role of government procurement in national policy. For example, there may be a security need to develop and purchase products domestically, or government procurement may, as is often the case, be used as a policy tool to promote smaller business, local industry, or advanced technologies.

While the GATT made government procurement an exception to the national treatment rule, the Agreement on Government Procurement resulting from the Uruguay Round mandates signatories offer national treatment in their government procurement. However, WTO Members are under no obligation to join the Agreement on Government Procurement. In fact, it has mostly been developed countries that have joined the Agreement. Therefore, in the context of government procurement, the national treatment rule applies only between those who have acceded to the Agreement on Government Procurement. For others, the traditional exception is still in force.

Domestic Subsidies

GATT Article III: 8(b) allows for the payment of subsidies exclusively to domestic producers as an exception to the national treatment rule, under the condition that it is not in violation of other provisions in Article III and the Agreement on Subsidies and Countervailing Measures. The reason for this exception is that subsidies are recognized to be an effective policy tool, and are recognized to be basically within the latitude of domestic policy authorities. However, because subsidies may have a negative effect on trade, the Agreement on Subsidies and Countervailing Measures imposes strict disciplines on their use.

GATT Article XVIII: C

Members in the early stages of development can raise their standard of living by promoting the establishment of infant industries, but this may require government support, and the goal may not be realistically attainable with measures that conform to the GATT. In such cases, countries can use the provisions of GATT Article XVIII: C to notify WTO Members and to initiate consultations. After consultations are completed and under certain restrictions, these countries are then allowed to take measures that are inconsistent with GATT provisions, excluding Articles I, II and XIII. Unlike the trade restrictions for balance of payment reasons in GATT Article XVIII: B, the Article XVIII: C procedure allows both broader measures and violations of the national treatment obligations in order to promote domestic infant industries. In the case concerning Malaysia's import permit system of petrochemical products, Malaysia resorted to GATT Article XVIII: C as a reason to enforce import restrictions on polyethylene. Although Singapore filed a WTO case against this Malaysian practice, Singapore later withdrew its complaint. Thus, neither a panel nor the Appellant Body had an opportunity to rule on the case.¹

¹ Malaysia – Prohibition of Imports of Polyethylene and Polypropylene (WT/DS1). This complaint had the distinction of being the first dispute under the new WTO dispute settlement system.

Other Exceptions to National Treatment

Exceptions peculiar to national treatment include the exception on screen quotas of cinematographic films under Article III: 10 and Article IV. The provisions of GATT Article XX on general exceptions, Article XXI on security exceptions and WTO Article IX on waivers also apply to the national treatment rule. For further details, see the relevant sections of Chapter 1 (MFN Principle).

National Treatment Rules Outside of GATT Article III

With the entry into force of the WTO Agreement, the principle of national treatment has been extended, although in a limited fashion, to agreements on goods, services, and intellectual property. For instance, among the agreements on goods, Article 5.1.1 of the TBT Agreement also addresses national treatment. GATS Article XVII provides national treatment for services and service providers and Article 3 of the TRIPS Agreement provides national treatment for the protection of intellectual property rights. The plurilateral Agreement on Government Procurement also contains a national treatment clause. (See the relevant chapters for more information on Trade in Services, Intellectual Property Rights, and Government Procurement.)

Economic Implications

There is a tendency for importing countries to try to use discriminatory application of domestic taxes and regulations to protect national production, often as the result of protectionist pressures from domestic producers. This distorts the conditions of competition between domestic and imported goods and leads to a reduction in economic welfare.

The national treatment rule does not in principle permit these sorts of policies designed to protect domestic products. GATT Article II does permit the use of tariffs as a means of protecting domestic industry, but this is because tariffs have high degrees of transparency and predictability since they are published and committed to in tariff schedules. On the other hand, domestic taxes and regulations are "hidden barriers to trade" that lack both transparency and predictability. Thus, they can have a large trade-distortive impact. The existence of GATT Article III generally impedes the adoption of policies and measures aimed at domestic protection, and thus promote trade liberalization.

In addition, regarding tariff concessions, GATT Article II recognizes tariffs have been used as tools for domestic industrial protection. Consequently, it sets a course for the achievement of liberalization through gradual reductions. Even if tariff reductions were made as a result of trade negotiations, if domestic taxes and regulations were to be applied in a discriminatory fashion to protect domestic industry simultaneously, then effective internal trade barriers would remain. The national treatment rule prohibits countries from using domestic taxes and regulations to offset the value of tariff concessions and is, therefore, a significant tool in promoting trade liberalization.

Main Cases

The Tuna Dolphin Controversy

Overview

The killing of dolphins has been the by-product of catching tuna for a long time in the Eastern Tropical Pacific (ETP). Here, schools of tuna swim below dolphins. Fisherman began to really take advantage of this in the 1950's, using dolphins as a means of tracking down tuna. This is also when the purse-seine net fishing method was developed, which entrapped both tuna and dolphins in its nets.

As the dolphin mortality rate began to rise, US fishermen realized that their fishing methods would only work if there were still living dolphins in the ETP. As a consequence, they began to develop methods that were dolphin-safe.

Dolphin mortality rates remained high though, and in 1972 Congress enacted the Marine Mammal Protection Act (MMPA). This act required that fishermen use dolphin-safe techniques, and established a permit system with a fixed ceiling on dolphin mortalities, thus limiting the taking rate.

The number of dolphins dying due to tuna fishing did not decline though, because the composition of ships fishing in the EPC changed. There were less US ships and more Mexican ships (along with a good number from Venezuela).

The killing of dolphins rest almost completely on foreign fishing techniques, so Congress added the Direct Embargo Provision to the MMPA. This provision prohibited the importation of tuna from countries that did not have mortality rates and regulatory programs comparable to those of the US. If countries did not prove that these two requirements were met, they would be faced with a direct tuna embargo.

To ensure compliance, Congress introduced three other measures into the MMPA:

- The Intermediary Nation Provision: stated that intermediary countries that exported tuna to the US, but were not involved in the catching of the tuna, must prove that they have prohibited tuna from countries banned by the US.
- The Pelly Amendment: stipulated that after a ban had been in place for six months, the President of the US was to be notified. This gave the President discretionary power to impose a ban of fish products for a period determined by the President.
- The Dolphin Protection Consumer Information Act: dictated that only tuna products caught through dolphin-safe methods could include a "dolphin safe" label.

During 1990-91, the US implemented embargos on Mexico, Venezuela, Panama, and Vanuatu (since then, Ecuador and Panama have complied with US standards). Mexico resisted conforming to US policies on the fishing of tuna, and continued to contribute greatly to dolphin deaths

GATT Articles

Article I Most favored nation treatment provision: prohibits contracting parties from discriminating between like products based on national origin

Article III National treatment provision: countries must apply tariffs equally to similar products of all other contracting parties.

Article XI Quantitative restriction provision: only permits countries to impose tariffs as trade restrictions and prohibits the use of such non-tariff restrictions as quotas and import or export licenses

Article XX Allowance of trade restrictions when deemed "necessary to protect human, animal or plant life or health" or "relating to the conservation of exhaustible natural resources."

Tuna-Dolphin I (1990)

- Mexico brings complaint MMPA inconsistent with GATT principles
- Violates articles III, XI, and does not meet exceptions of XX.

III. Product vs. Process

XI. Embargoes vs. Tariffs.

XX. Couldn't be applied outside the jurisdiction of the US

Outcome: Mexico won the challenge, but the findings weren't formally adopted due to political pressures of upcoming NAFTA negotiations: not legally binding

Tuna - Dolphin II (1992)

- Brought by European Economic Community
- MMPA did not have right to place embargoes on intermediary nations
- Violated article XI mostly, but also III and XX
- GATT ruled against US on basis of Articles XI and III
- Went against the original ruling and found that it did qualify under exceptions in Article XX in the fact that those resources could be outside of the US, but...
- It still didn't qualify since the embargo wasn't primarily aimed at conservation
- Ruling vetoed by US thanks to procedure that predated the WTO

The Future: another attempt at embargo?

Shrimp-Turtle dispute

- very similar situation
- contradictory ruling to that of Tuna-Dolphin, helps the case would need to satisfy things that the Shrimp-Turtle case did not:
 - 1. State must be flexible in implementation of regulatory program

- 2. Limit breadth of embargo
- 3. Multilateral approach
- 4. Treat all offending countries equally
- 5. Lack of due process

Conclusion

- Difficult to convince WTO / GATT to rule for environmental protection measures against free trade.
- Bear the burden of proving that these are permissible reasons to bar trade
- Use appropriate barriers to trade
- Turtle Shrimp ban sheds light on appropriate actions to take

The Case of the Mexican Cross-Border Trucking Services

In 1995 Mexico complained about the lack of access to the U.S.-market with regard to Trucking Services after the U.S. had put in place a moratorium on the processing of applications by Mexican since 1982 as well as a prohibition barring Mexican investment in U.S. companies providing transport of international cargo.

The legal basis for these measures was the 1982 U.S. Bus Regulatory Reform Act which started a (initially) two-year moratorium on the issuance of new motor carrier operating authority to foreign carriers. While the ban against Canada was lifted very soon, it remained in place with regard to Mexico. Consequently Mexican trucking companies were unable to provide services in the U.S. and Mexican nationals were not allowed to invest in U.S. trucking companies. The only exceptions allowed for were Mexican trucks headed to the commercial zones of U.S. border cities. From the commercial zone the Mexican truck is to return to Mexico while the cargo will be picked up by a U.S. truck for further transport.

According to NAFTA, which was signed on 18 December 1992 and entered into force on 1 January 1994, Mexican nationals are permitted to carry cargo throughout the U.S. since 1 January 2000. Two years later, none of these deadlines had been met by the U.S.

The case is the first NAFTA Chapter 20 panel report to cover trade in services. The panel came to the conclusion that the U.S. violated Articles 1202(National Treatment) and 1203 NAFTA (Most Favoured Nation Treatment) "by failing to lift its moratorium on the processing of applications for Mexican trucking firms to operate in the U.S." Mexican trucking companies must not be treated less favourably than U.S. or Canadian companies.

It has been argued by the U.S. the limitations put in place against Mexico were justified under Art. 2101 of the NAFTA. Art. 2101 of the NAFTA allows for exceptions which are "necessary to secure compliance with law or regulations that are not inconsistent with the provisions of [NAFTA], including those relating to health and safety consumer protection." The panel noted correctly that Art. 2101 NAFTA only refer to the least trade-restrictive measure- which the U.S. moratorium clearly is not.

Moreover did the U.S. not prove that the moratorium was in fact necessary within the meaning of Art. 2101 NAFTA and finally did the panel not accept the claim already brought forward by the U.S. in the *Shrimp / Turtle* and *Yellowfin Tuna*cases that the moratorium was justified as long as Mexico did not adopt internal rules which are fully compatible with the U.S. rules, especially since it "is unclear when, if ever, the United States will be satisfied that the Mexican regulatory system is adequate to lift the moratorium with respect to all Mexican providers of trucking services." Interestingly enough, the U.S. did not attempt to prove its point regarding the alleged safety concerns but rather "argued that Mexico had failed to prove a prima facie violation of [NAFTA] Chapter 11", which was rejected by the panel to the effect that a violation of Art. 1102 NAFTA was found as well as was with regard to all other Mexican claims. Consequently the panel recommended that the U.S. bring into compliance with NAFTA its policies regarding cross-border trucking services.

Common Techniques of International Trade Law

Free trade between countries is important. It allows companies and workers to specialize in what they do best. Competition forces companies to be more productive. Costs are kept lower. Consumers have the options of buying cheaper and better goods and services. Free trade helps create jobs, both in the domestic country where goods are made and in the foreign country where the goods are imported.

Trade Restrictions

In spite of the many advantages of free trade, many nations put limits on trade for a variety of reasons and this practice is known as Protectionism. The main types of trade restrictions are tariffs, subsidies, quotas, embargoes, licensing requirements, and standards.

Tariff

A tariff is a tax on goods imported from a foreign country. So this is imposed upon the good at the time of entry inside the boundary of the country. Tariffs raise the price of the imported goods. This makes the price of the imported goods equal to or higher than the price of the domestic goods. The government of the country that is importing the goods collects the money from the tariff. Remember that a tariff on tea led to the American Revolution.

Subsidy

Subsidies are like tariffs in reverse. A government will give money to domestic producers of certain goods. This allows the producers to charge less than foreign producers to keep prices low. Tariffs are paid for by the consumers of the goods. But subsidies are paid for by the government (which gets its money from taxpayers). Taxpayers may or may not use the goods that are subsidized, so they may be paying for the cost of a product they do not even use. Some things that are commonly subsidized in the United States are gasoline, utilities, farm crops, and some student loans.

Quota

A quota is a limit on the amount of goods that can be imported. Putting a quota on a good creates a shortage, which causes the price of the good to rise. That allows domestic producers to raise their prices and to expand their production. A quota on cars, for example, might limit foreign-made cars to one million a year. If Americans buy twenty million new cars each year, this would leave most of the market to American producers. A quota benefits domestic producers, but it does not benefit the government.

Embargo

An embargo stops exports or imports of a product or group of products to or from another country. Sometimes all trade with a country is stopped. This is usually for political reasons. Because the U.S. doesn't want to support countries that may support terrorism, it has used embargos against Iran, Iraq, and Syria.

License

Some countries require a producer to get a license to import or export goods. In this way, the government can limit the number of imports by limiting the number of licenses issued. Export licenses can be used to keep domestic prices on agricultural products from rising. If too much wheat, for example, were exported, it would cause the domestic price of wheat to rise. Sometimes export licenses have been used to restrict trade with certain countries for political reasons. The government collects money from the sale of licenses.

Health and Safety Standards

Health and safety standards are set for imported goods. These are sometimes used to restrict imports by many countries. Because the standards are set by the importing country's government, the standards are sometimes much higher than those for domestic goods. Standards have become a major form of trade restriction.

Voluntary Export Restraint

A voluntary export restraint (VER) or voluntary export restriction is a government imposed limit on the quantity of goods that can be exported out of a country during a specified period of time. Also, VER is typically implemented on a bilateral basis, that is, on exports from one exporter to one importing country.

Dumping

The definition of dumping is the act of charging a lower price for a good in a foreign market than the price charged for the same good in the domestic market. This is often referred to as selling at less than "fair value". Under the World Trade Organization (WTO) Agreement, dumping is condemned (but is not prohibited) if it causes or threatens to cause material injury to a domestic industry in the importing country. Usually, nations resort to this practice to gain entry and market share in foreign markets, but it can also be used to sell off surplus or obsolete goods. Dumping creates unfair competition for domestic industries, and

governments are justifiably concerned when they suspect foreign countries of dumping products on their markets. They often retaliate by imposing punitive tariffs that drive up the price of the imported goods.

Implications

All of these trade restrictions limit world trade. This has the effect of limiting total production of goods. It shifts production away from the most efficient producers to less efficient ones. It reduces employment and/or wages, and it causes an increase in prices.

Reasons for Use of Restrictive Measures

If trade restrictions are bad, why do countries use them? They want to protect their own businesses and workers. Some beginning businesses that are just getting started need extra help to become successful. Governments also want to protect certain industries. Agriculture is one area where tariffs and subsidies are commonly used to help domestic farmers earn enough from farming to keep raising food. Political reasons are also a major reason for trade restrictions.

INTERNATIONAL TRADE LAW AND FINANCIAL INSTITUTIONS: IMF & IBRD

The Nature and Characteristics of International Institutions

Over the years, international institutions of various types - treaties, organizations, regimes, conventions, and so on have grown greatly in numbers and importance. Paralleling this growth, the scholarly literature on international relations has seen successive waves of efforts to describe and explain institutional phenomena. Indeed, international institutions have frequently been at the center of leading theoretical debates in the field.

In contemporary global politics, international institutions play an enormous role. To most of the world, they symbolize the hope for international peace and security through global cooperation and mutual economic development. Examples of international institutions include the International Monitory Fund (IMF), International Bank for Reconstruction and Development (IBRD), the United Nations (UN), The General Agreement on Trade and Tariffs, *etc.*. Most international institutions operate as part of one or more international regimes. An international regime is a set of rules, standards, and procedures that govern national behaviour in a particular area. Examples of international regimes include arms control, foreign trade, and Antarctic exploration. International institutions are often central to the functioning of an international regime, giving structure and procedures to the "rules of the game" by which nations must play.

Following are the essentials of international institution:

- I. Its origin is based on multilateral international agreement.
- II. The institution has a personality of its own, which is distinct from that of its individual members
- III. It has permanent organs which carry out common aims.

The System of Bretton Woods

In times of globalisation the economic environment changes rapidly. Capital movements become larger and at the same time less controllable. Therefore, the need for a stabilising system becomes more and more apparent. In the past such a system has been established at the conference of Bretton Woods. Already in 1944 the British economist John Maynard Keynes emphasised "the importance of rule-based regimes to stabilise business expectations something he accepted in the Bretton Woods system of fixed exchanged rates." Recently leading industrial nations have been calling for a renewal of the purpose and the spirit of this system in order to cope with the growing size of international trade and capital flows. This essay gives a short overview of the system's development from 1944 until today and stresses especially problems and obstacles. It identifies mistakes that have been made and points out aspects that have to be taken into account when implementing a "new system of Bretton Woods".

Development of the system

The international economic situation

After World War I most countries wanted to return to the old financial security and stable situation of pre-war times as soon as possible. Discussions about a return to the gold standard began and by 1926 all leading economies had re-established the system, according to which every nation's circulating money had to be backed by reserves of gold and foreign currencies to a certain extent. But several mistakes in implementing the gold standard (mainly that a weakened Great Britain had to take the leading part and that a number of main currencies where over- or undervalued) led to a collapse of the economic and financial relations, peaking in the Great Depression in 1929. Every single country tried to increase the competitiveness of its export products in order to reduce its payment balance deficit by deflating its currency. This strategy only led to success as long as a country was deflating faster and more strongly than all other nations. This fact resulted in an international deflation competition that caused mass unemployment, bankruptcy of enterprises, the failing of credit institutions, as well as hyper inflations in the countries concerned.

In the 1930s several conferences dealing with the world monetary problems caused by the Great Depression had ended in failure. But after World War II the need for a stabilizing system that avoided the mistakes, which had been made earlier, became evident. Plans were made for an innovative monetary system and a supervising institution to monitor all actions. First negotiations took place under wartime conditions

The conference of Bretton Woods

In 1944 an international conference took place in Bretton Woods, New Hampshire (USA). 44 countries attended this conference in order to restructure international finance and currency relationships. The participants of this conference created the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD/World Bank).

Additionally, they agreed on implementing a system of fixed exchange rates with the U.S. dollar as the key currency.

The plans for the system of Bretton Woods were developed by two important economists of these days, the American minister of state in the U.S. treasury, Harry Dexter White, and the British economist John Maynard Keynes who stated: "We, the delegates of this Conference, Mr President, have been trying to accomplish something very difficult to accomplish.[...] It has been our task to find a common measure, a common standard, a common rule acceptable to each and not irksome to any." This statement outlines the difficulty of creating a system that every nation could accept. The ideas of John Maynard Keynes and Harry Dexter White have been described as very different from each other on several occasions but in fact there are extraordinary similarities.

According to the White plan, a Bank for Reconstruction (today the World Bank) and an International Stabilisation Fund should be established. The Keynes plan called for the same. The only difference was that Keynes wanted to vest the IMF with possibilities to create money (a fact that can easily be understood in the background of Great Britain's suffering from the deflation policies in the Inter-War period) and with the authority to take actions on a much larger scale. In case of balance of payments imbalances John Maynard Keynes recommended that both sides, debtors and creditors, should change their policies. Countries with payment surpluses should increase their imports from the deficit countries and thereby create a foreign trade equilibrium. Harry Dexter White, on the other hand, saw an imbalance as a problem only of the deficit country. Economists today agree that White was mistaken and Keynes was more farsighted.

However, Keynes' plan was never discussed seriously at Bretton Woods and the participants agreed on the White plan. The United States defined the value of its dollar in terms of gold, so that one ounce of gold was equal to \$ 35. All other members had to define the value of their money according to what was called the "par value system" in terms of U.S. dollars or gold.

The International Monetary Fund

Purpose

The IMF was officially established on December 27, 1945, when the 29 participating countries at the conference of Bretton Woods signed its Articles of Agreement. It commenced its financial operations on March 1, 1947. The IMF is an international organisation, which today consists of 183 member countries. The purposes of the IMF are to promote international monetary cooperation by establishing a global monitoring agency that supervises, consults, and collaborates on monetary problems. It facilitates world trade expansion and thereby contributes to the promotion and maintenance of high levels of employment and real income. Furthermore, the IMF ensures exchange rate stability to avoid competitive exchange depreciation. It eliminates foreign exchange restrictions and assists in creating systems of payment for multilateral trade. Moreover, member countries with

disequilibriums in their balance of payments are provided with the opportunity to correct their problems by making the financial resources of the IMF available for them.

Operations

When joining the IMF, each country must contribute a certain sum of money, which is called a quota subscription and is a sort of credit deposit. These quotas form the largest source of money at the IMF's disposal and the IMF uses this money to grant loans to member countries with financial difficulties. Each nation that has joined the system can immediately withdraw 25 per cent of its quota in case of payment problems and it may request more if this sum is insufficient. The debts have to be paid back as soon as possible. Additionally, the country must demonstrate how the payment difficulties will be solved. The higher a country's contribution is, the higher is the sum of money it can borrow from the IMF. Furthermore, the quotas determine the voting power of each member.

The money, which the IMF lends, should not be compared to a loan of a conventional credit institution. For the country that files an application it is rather an opportunity to buy a foreign currency and paying with gold or the national currency. Within three to five years the country has to pay back its debts. According to the IMF in the course of a typical year circa 20 currencies are borrowed and "most potential borrowers want only the major convertible currencies: the U.S. dollar, the Japanese yen, the deutsche mark, the pound sterling, and the French Franc." Therefore, although quotas are worth about \$193 billion in theory, the sum at the IMF's disposal is deceptively large.

Organization

The IMF has no control over national economic policies of its members. On the contrary, the chain of command runs from the governments of the member countries to the IMF. The highest authority is the Board of Governors, which consists of one Governor (usually the minister of finance or the head of the central bank) of each member country. Additionally, there is an equal number of Alternates (representative Governors). The Board of Governors gathers only on the occasion of annual meetings.

The IMF's day-to-day work is managed by the Executive Board, which is formed of 24 Executive Directors who meet at least three times a week to supervise the implementation of the IMF's policies. The member countries with the highest quotas send one Executive Director to the Board, who has as many votes as the quota regulation assigns to his country.

The remaining Directors are elected by the rest of the countries and they only have as many votes as they had in the election. This point illustrates the dominance of the USA in the System of Bretton Woods as the "United States, with the world's largest economy, contributes most to the IMF, providing about 18 percent of total quotas (about \$35 billion)". Thus the USA have most votes, by now more than 265.000.

International Bank for Reconstruction and Development (IBRD)

The International Bank for Reconstruction and Development (IBRD) is one of five institutions that comprise the World Bank Group. The IBRD is an international organization whose original mission was to finance the reconstruction of nations devastated by World War II. Now, its mission has expanded to fight poverty by means of financing states. Its operation is maintained through payments as regulated by member states. It came into existence on December 27, 1945 following international ratification of the agreements reached at the United Nations Monetary and Financial Conference of July 1 to July 22, 1944 in Bretton Woods, New Hampshire.

The IBRD provides loans to governments, and public enterprises, always with a government (or "sovereign") guarantee of repayment subject to general conditions. The funds for this lending come primarily from the issuing of World Bank bonds on the global capital markets—typically \$12–15 billion per year. These bonds are rated AAA (the highest possible) because they are backed by member states' share capital, as well as by borrowers' sovereign guarantees. (In addition, loans that are repaid are recycled, or relent.) Because of the IBRD's credit rating, it is able to borrow at relatively low interest rates. As most developing countries have considerably lower credit ratings, the IBRD can lend to countries at interest rates that are usually quite attractive to them, even after adding a small margin (about 1%) to cover administrative overheads.

The World Bank Group: Present

WBG has been catalytic in leveraging financing from private markets with its risk mitigation instruments. Its guarantees can open new financing sources, reduce costs of capital, and extend maturities by providing coverage for risks that the market is unable or unwilling to bear. WBG's participation as guarantor can support transparency and improve market confidence, but cannot make fundamentally unviable projects, viable.

The World Bank Group (WBG) is a family of five international organizations responsible for providing finance and advice to countries for the purposes of economic development and eliminating poverty. The Bank came into formal existence on 27 December 1945 following international ratification of the Bretton Woods agreements, which emerged from the United Nations Monetary and Financial Conference (1 July – 22 July1944). It also provided the foundation of the Osiander-Committee in 1951, responsible for the preparation and evaluation of the World Development Report. Commencing operations on 25 June 1946, it approved its first loan on 9 May 1947 (\$250M to France for postwar reconstruction, in real terms the largest loan issued by the Bank to date). Its five agencies are:

- International Bank for Reconstruction and Development (IBRD)
- International Development Association (IDA)
- International Finance Corporation (IFC)
- Multilateral Investment Guarantee Agency (MIGA)
- International Centre for Settlement of Investment Disputes (ICSID)

The increased importance of the international trade in services has brought the WTO into the sphere of international investment. This sphere, however, already has other important players. The International Center for the Settlement of Investment Disputes (ICSID) has been around for almost fifty years, and many regional trade agreements include provisions dealing with the settlement of investment disputes. Needless to say, the field of international investment is crowded.

Increasingly, disputes arise containing issues pertaining to trade and investment. In the face of such complexity, scholars contend that a common alternative is to allow these issues to be resolved within the dispute settlement bodies of preferential trade agreements. By doing so, the jurisdictional issues born of the overlap between the WTO's jurisdiction and that of another body, are eliminated. Whether or not this trend will continue depends on the WTO's ability to acclimate to the new international business climate. In a system governed by the consensus of its members, this may be easier said than done.

MODULE-II

WTO, GATS & INTERNATIONAL TRADE

WTO, GATS & INTERNATIONAL TRADE:

The Declaration of the High-level Meeting on the Rule of Law recognizes the importance of fair, stable and predictable legal frameworks for generating inclusive, sustainable and equitable development, economic growth and employment, generating investment and facilitating entrepreneurship. In that regard, it commended the work of the United Nations Commission on International Trade Law (UNCITRAL) in modernizing and harmonizing international trade law.

General Assembly has repeatedly reaffirmed its belief that the progressive modernization and harmonization of international trade law, and reducing or removing legal obstacles to the flow of international trade. This contributes significantly to universal economic cooperation among all States on a basis of equality, equity, common interest and respect for the rule of law, and to the elimination of discrimination in international trade. General Assembly has also emphasized that the implementation and effective use of modern private law standards in international trade are essential for advancing good governance, sustained economic development and the eradication of poverty and hunger (for example, in resolution 69/115, para. 12).

UNCITRAL instruments and tools are also relevant for creating an environment of sustainable economic activity conducive to post-conflict reconstruction and preventing societies from sliding back into conflict (resolution 66/94, paras. 15-17). The UNCITRAL secretariat, International Trade Law Division at the Office of Legal Affairs, provides assistance to States that seek to promote the rule of law in the area of international and domestic trade and investment by assisting them to identify needs for commercial law reforms and implement the reforms in compliance with internationally accepted commercial law standards.

It is widely accepted by developing and developed countries that trade creates wealth and is essential to the economic health of the world. But who works out the rules for international trade and decides how payments should be made and disputes are to be settled?

When world trade began to expand dramatically in the 1960s, national governments began to realize the need for a global set of standards and rules to harmonize and modernize the worldwide assortment of national and regional regulations, which until then, largely governed international trade. They turned to the United Nations, which in 1966 recognized the need for it to play a more active role in removing legal obstacles to the flow of international trade and established the United Nations Commission on International Trade Law (UNCITRAL). UNCITRAL has since become the core legal body of the United Nations system in the field of international trade law.

Much of the complex network of international legal rules and agreements that affects today's commercial arrangements has been reached through long and detailed consultations and negotiations organized by UNCITRAL. Its aim is to remove or reduce legal obstacles to the flow of international trade and progressively modernize and harmonize trade laws. It also

seeks to coordinate the work of organizations active in this type of work and promote wider acceptance and use of the rules and legal texts it develops.

When world trade began to expand dramatically in the 1960s, national governments began to realize the need for a global set of standards and rules to harmonize national and regional regulations, which until then governed international trade.

THE UNITED NATIONS COMMISSION ON INTERNATIONAL TRADE LAW (UNCITRAL)

In the years since its establishment, UNCITRAL has been recognized as the core legal body of the United Nations system in the field of international trade law. A legal body with universal membership specializing in commercial law reform worldwide for over 50 years, UNCITRAL's business is the modernization and harmonization of rules on international business.

Trade means faster growth, higher living standards, and new opportunities through commerce. In order to increase these opportunities worldwide, UNCITRAL is formulating modern, fair, and harmonized rules on commercial transactions. These include:

- Conventions, model laws and rules which are acceptable worldwide
- Legal and legislative guides and recommendations of great practical value
- Updated information on case law and enactments of uniform commercial law
- Technical assistance in law reform projects
- Regional and national seminars on uniform commercial law

Membership

UNCITRAL's original membership comprised 29 states, and was expanded to 36 in 1973, and again to 60 in 2002. Member states of UNCITRAL are representing different legal traditions and levels of economic development, as well as different geographic regions. States includes 14 African states, 14 Asian states, 8 Eastern European states, 10 Latin American and Caribbean states, and 14 Western European states. The Commission member States are elected by the General Assembly. Membership is structured so as to be representative of the world's various geographic regions and its principal economic and legal systems. Members of the commission are elected for terms of six years, the terms of half the members expiring every three years.

The methods of work are organized at three levels. The first level is UNCITRAL itself (The Commission), which holds an annual plenary session. The second level is the intergovernmental working groups (which is developing the topics on UNCITRAL's work program. Texts designed to simplify trade transactions and reduce associated costs are developed by working groups comprising all member States of UNCITRAL, which meet once or twice per year. Non-member States and interested international and regional organizations are also invited and can actively contribute to the work since decisions are taken by consensus, not by vote. Draft texts completed by these working groups are submitted to UNCITRAL for finalization and adoption at its annual session. The International

Trade Law Division of the United Nations Office of Legal Affairs provides substantive secretariat services to UNCITRAL, such as conducting research and preparing studies and drafts. This is the third level, which assists the other two in the preparation and conduct of their work.

Secretariat

Located originally at United Nations Headquarters in New York, the UNCITRAL secretariat was transferred to the United Nations Office, Vienna in September 1979. With a staff of 21 (14 legal officers and seven support staff), the International Trade Law Division of the United Nations Office of Legal Affairs provides substantive secretariat services to UNCITRAL. The Director of the Division serves as the Secretary of UNCITRAL. To assist UNCITRAL in its work, the secretariat undertakes a variety of different tasks, including preparation of studies, reports and draft texts on topics under consideration for possible inclusion in the work programme; legal research, drafting and revision of working papers and legislative texts on topics already included on the work programme; reporting on Commission and working group meetings; provision of technical legislative assistance to States; preparation of UNCITRAL publications; as well as the provision of a range of administrative services to UNCITRAL and its working groups.

Work Methods

Texts designed to simplify trade transactions and reduce associated costs are developed by working groups comprising all member States of UNCITRAL, which meet once or twice per year. Non-member States and interested international and regional organizations are also invited and, since decisions are taken by consensus, not by vote, can actively contribute to the work. Draft texts completed by these working groups are submitted to UNCITRAL for finalization and adoption at its annual session.

Functions of UNCITRAL

- Coordinating the work of organizations active and encouraging cooperation among them
- Promoting wider participation in existing international conventions and wider acceptance of existing model and uniform laws.
- Preparing or promoting the adoption of new international conventions, model laws and uniform laws and promoting the codification and wider acceptance of international trade terms, provisions, customs and practice, in collaboration, where appropriate, with the organizations operating in this field.
- Promoting ways and means of ensuring a uniform interpretation and application of international conventions and uniform laws in the field of the law of international trade.
- Collecting and disseminating information on national legislation and modern legal developments, including case law, in the field of the law of international trade.
- Establishing and maintaining a close collaboration with the UN Conference on Trade and development.

• Maintaining liaison with other UN organs and specialized agencies concerned with international trade.

Conventions

The Convention is an agreement among participating states establishing obligations binding upon those States that ratify or accede to it. A convention is designed to unify law by establishing binding legal obligations To become a party to a convention, States are required formally to deposit a binding instrument of ratification or accession with the depositary. The entry into force of a convention is usually dependent upon the deposit of a minimum number of instruments of ratification.

UNCITRAL conventions:

- The Convention on the Limitation Period in the International Sale of Goods (1974) (text)
- The United Nations Convention on the Carriage of Goods by Sea (1978)
- The United Nations Convention on Contracts for the International Sale of Goods (1980)
- The United Nations Convention on International Bills of Exchange and International Promissory Notes (1988)
- The United Nations Convention on the Liability of Operators of Transport Terminals in International Trade (1991)
- The United Nations Convention on Independent Guarantees and Stand-by Letters of Credit (1995)
- The United Nations Convention on the Assignment of Receivables in International Trade (2001)
- The United Nations Convention on the Use of Electronic Communications in International Contracts (2005)
- The United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (2008)

Model laws

A model law is a legislative text that is recommended to States for enactment as part of their national law. Model laws are generally finalized and adapted by UNCITRAL, at its annual session, while conventions require the convening of a diplomatic conference.

- UNCITRAL Model Law on International Commercial Arbitration (1985)
- Model Law on International Credit Transfers (1992)
- UNCITRAL Model Law on Procurement of Goods, Construction and Services (1994)
- UNCITRAL Model Law on Electronic Commerce (1996)
- Model Law on Cross-border Insolvency (1997)

- UNCITRAL Model Law on Electronic Signatures (2001)
- UNCITRAL Model Law on International Commercial Conciliation (2002)
- Model Legislative Provisions on Privately Financed Infrastructure Projects (2003)

UNCITRAL also drafted the:

- UNCITRAL Arbitration Rules (1976) (text)—revised rules will be effective August 15, 2010; pre-released, July 12, 2010
- UNCITRAL Conciliation Rules (1980)
- UNCITRAL Arbitration Rules (1982)
- UNCITRAL Notes on Organizing Arbitral Proceedings (1996)

THE UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD)

The United Nations Conference on Trade and Development (UNCTAD) was established in 1964 as a permanent intergovernmental body. UNCTAD is the part of the United Nations Secretariat dealing with trade, investment, and development issues. The organization's goals are to: "maximize the trade, investment and development opportunities of developing countries and assist them in their efforts to integrate into the world economy on an equitable basis. UNCTAD was established by the United Nations General Assembly in 1964 and it reports to the UN General Assembly and United Nations Economic and Social Council.

The primary objective of UNCTAD is to formulate policies relating to all aspects of development including trade, aid, transport, finance and technology. The conference ordinarily meets once in four years; the permanent secretariat is in Geneva. One of the principal achievements of UNCTAD (1964) has been to conceive and implement the Generalised System of Preferences (GSP). It was argued in UNCTAD that to promote exports of manufactured goods from developing countries, it would be necessary to offer special tariff concessions to such exports. Accepting this argument, the developed countries formulated the GSP scheme under which manufacturers' exports and import of some agricultural goods from the developing countries enter duty-free or at reduced rates in the developed countries. Since imports of such items from other developed countries are subject to the normal rates of duties, imports of the same items from developing countries would enjoy a competitive advantage.

The creation of UNCTAD in 1964 was based on concerns of developing countries over the international market, multi-national corporations, and great disparity between developed nations and developing nations. The United Nations Conference on Trade and Development was established to provide a forum where the developing countries could discuss the problems relating to their economic development. The organisation grew from the view that existing institutions like GATT (now replaced by the World Trade Organization, WTO), the International Monetary Fund (IMF), and World Bank were not properly organized to handle

the particular problems of developing countries. Later, in the 1970s and 1980s, UNCTAD was closely associated with the idea of a New International Economic Order (NIEO).

The first UNCTAD conference took place in Geneva in 1964, the second in New Delhi in 1968, the third in Santiago in 1972, fourth in Nairobi in 1976, the fifth in Manila in 1979, the sixth in Belgrade in 1983, the seventh in Geneva in 1987, the eighth in Cartagena in 1992, the ninth at Johannesburg (South Africa) in 1996, the tenth in Bangkok (Thailand) in 2000, the eleventh in São Paulo (Brazil) in 2004, the twelfth in Accra in 2008, the thirteenth in Doha (Qatar) in 2012 and the fourteenth in Nairobi (Kenya) in 2016.

Currently, UNCTAD has 194 member states and is headquartered in Geneva, Switzerland. UNCTAD has 400 staff members and a bi-annual (2010–2011) regular budget of \$138 million in core expenditures and \$72 million in extra-budgetary technical assistance funds. It is a member of the United Nations Development Group. There are non-governmental organizations participating in the activities of UNCTAD.

INTERNATIONAL TRADE AND THE GENERAL AGREEMENT ON TRADES AND TARIFFS (GATT)

General Agreement on Trades and Tariffs (GATT) was formed in 1947 as part of the Bretton Woods Agreement. GATT set up a series of negotiating rounds, which were primarily intended to reduce and gradually eliminate quotas, duties, and tariffs in respect of trade in goods. The basic objective of the GATT was to progressively reduce national barriers to international trade, (a) initially through across-the-board tariff reduction, (b) later the removal of non-tariff measures, and (c) eventually, the development of global standards for fair trade. The fundamental promise of the GATT in pursuing its objectives was to reduce trade barriers and to facilitate trade liberalization and expansion through multilateral consensus in a global forum bringing together all nations, developed and developing, rich and poor.

Origins of the GATT System: The Role of GATT -ITO Preparatory Work

The economy of pre-World War II was dominated by US and its major trading partners. This process took place in the form of bilateral agreements between them. The US in order to secure more open markets offered its own tariff cuts. Subsequent to World War II, diverse measures were adopted to liberalize trade between various nations to ensure close economic co-operation between them.

Hence, the wartime scenario made the groundwork for the concept of liberalization of international trade. This was by and large initiated by the United States of America. However, the major obstacle towards achieving this objective was the existence of multifarious trade barriers. This in turn called for a universal set of regulations, which would be applicable to all the nations. In order to necessitate an overall international progress in the economic order, it was necessary that a substantial improvement be achieved in three major domains i.e., investment, trade and exchange policy.

After several rounds of discussions between the United States of America, the United Kingdom and Canada in the Bretton Wood Conference, it was agreed that the world economy would be organized around three institutions':

- International Monetary Fund
- The International Bank for Reconstruction and Development or the World Bank
- International Trade Organization

International Monetary Fund was formulated to look after the short-term problems relating to international liquidity and International Bank for Reconstruction and Development to take care of international investments. Likewise International Trade Organization was to take care of the 'actual' trade relationship.

However, the International Trade Organization never came to see the light of the day. This was due to the non-ratification of the agreement relating to International Trade Organization or ITO, especially by United States, to which 53 states were signatories. Although the failure of establishing the ITO was a major setback to the international trade, its contribution to the movement on international trade regulation cannot be overlooked. The establishment of the ITO brought into existence the ITO Charter which laid down the foundations not only for GATT but also for the present WTO Agreement.

The resultant impact of the ITO was that even after its failure to take off as an organization, the ITO Charter was used to formulate GATT. This started when some of the participants at the London Conference on Trade and Employment recommended that the tariff negotiation be initiated in the Charter at Geneva. Those regulations, which were required to protect the integrity of the trade and concessions, were included and those relating to employment investment etc. were disregarded.

As a result of these discussions, participated by 23 nations, the General Agreement on Tariffs and Trade (GATT) came into being in 1947. It came into force in 1948. The agreement was intended to provide a temporary international medium that encourages free trade between member states by regulating and reducing tariffs on traded goods and by providing a common mechanism for resolving trade disputes. However, GATT surpassed expectations. Despite an intention to make it a temporary Agreement, GATT 1947 became operational for almost fifty years providing the only international forum and framework (other than regional arrangements) for carrying forward the objectives of free and fair trade. Its popularity grew over the years and GATT membership finally was comprised of more than 125 countries.

GATT was thus established, on a temporary basis to break down trade barriers in the form of tariffs, quotas, preferential trade agreements between countries, etc., to make the flow of commodities and capital, less restricted by national government influence. It is for its temporary nature that a signatory to the agreement is known as a Contracting Party, since it is not an organization. Hence, the origin of GATT traces back to 1947, which governed most of the world's trade in goods for almost, half a century. It was the foremost step towards liberalization of global trade. Its importance may be highlighted as a multilateral agreement, which facilitated liberalization of trade by reducing tariffs, opening markets and framing

rules for free and fair trade. The original signatories to GATT in 1947 were 23 nations. The GATT 1947 covered only trade in goods.

It is pertinent to note that GATT 1947, unlike GATT 1994, did not cover trade in Trade in Services, Agriculture, Textile and Apparel. This Agreement could also not justify the inclusion of intellectual property rights regime within its ambit and neither did it regulate the foreign investment that is incidental to the free movement of goods.

ITO and the Havana Charter

Four Preparatory conferences were held from 1946 – 1948 to draft the ITO-GATT Charter.

- 1. October November 1946 at London the issues that were dealt in this conference were: quantitative restrictions, issues relating to LDCs, full employment, general commercial policies and restrictive trade practices.
- 2. New York (Jan-Feb 1947): Full draft of the GATT was developed. The GATT discussions at New York Conference focused on which articles of ITO were to be included in the GATT.
- 3. Geneva Conference (April 1947): Issues dealt with preparatory draft of the ITO and tariff negotiations.
- 4. Havana Conference: Formally the UN Conference on Trade and Employment from November 1947 March 1948. Major achievements of this conference were that the ITO Charter was considered and the first session of Contracting Parties of GATT also met at Havana. However divergent views were expressed between developed and developing countries. It also established an interim Commission for the ITO i.e., ICITO for preparing the administrative groundwork for the establishment of GATT.

The ITO (Havana) Charter 1948

The Charter consisted of 106 Articles divided into 11 Chapters.

Chapter I: Objectives and purposes included stability and wellbeing; peaceful and friendly relations; higher standards of living; full employment etc.

Chapter II focused on employment and economic activities which included provisions relating to unemployment and underemployment; removal of Balance of Payment (BoP); exchange of economic information; control of inflation and fair labour standards.

Chapter III focused on economic development and reconstruction including development of internal resources, cooperation in economic development, international investment for economic development, government assistance for economic development etc.

Chapter IV: Commercial policy issues which include

a) tariffs, preferences, internal taxation and regulations, national treatment on taxation, quantitative restrictions and related matters;

- b) subsidies;
- c) State trading and related matters
- d) General commercial policy provisions

Chapter V: Restrictive business practices including general policy issues, consultation procedure and investigation procedures and subsidies.

Chapter VI: Inter-governmental commodity agreements including primary commodities, commodity conferences and commodity disputes.

Chapter VII: The ITO including the structure, functioning, membership and the relation with other international financial institutions.

Chapter VII: Settlement of disputes – this dealt with

- UN Charter procedure
- Consultation and arbitration and
- ICJ

Chapter IX: General provisions which include relation with non-members, amendment procedure (two-thirds); review of charter, withdraw and termination etc.

Objectives, Structure and Functions of GATT 1947

Objectives of GATT

The GATT 1947 was an international agreement, i.e., a document setting out the rules for conducting international trade, and an international organization created later to support the agreement. The primary objective of GATT was to liberalize and expand trade through negotiated reductions in trade barriers. It provided a forum in which countries could discuss and resolve trade problems and make available contractual rights and obligations for Contracting Parties to challenge formally other members' trade practices.

The important objectives of GATT as stated in preamble are:

- Raising the standard of living and the progressive development of the economies of the respective countries.
- Ensuring full employment and a large and steady growing volume of real income and effective demand.
- Better utilization of the resources of the world.
- Expansion of production and international trade.
- Recognizing that international trade as a means of achieving economic and social advancement.
- Equalizing and lowering trade barriers.

The GATT contains numerous Articles and Annexure. It is a cluster of various agreements, protocols etc. Some of these relate to the general principles whereas some relate to the revision of various tariff schedules. There are around 38 Articles dealing with commitments

on tariffs. These depict the rules and obligations to prevent nations from pursuing trade policies, which would be self-defeating if emulated, by other nations. The unrevised text of GATT encompasses three parts. Later on a new chapter was added.

Structure of GATT

The prime body of GATT was the Session of Contracting parties that met annually. It was in this meeting that the major decisions were taken by way of a vote by the parties. But generally they did not go for a vote but preferred a consensus. In case a voting took place each Contracting Party had one vote and decisions were arrived at by simple majority. However, two-thirds majority was essential for any major decisions.

Other than the Session of contracting parties, the GATT Council was authorized to act on any routine and urgent matters. They had many different standing committees or councils like the Committee on Trade and Development, Textiles Committee that looked into matters like development of trade in developing countries. There also were ad hoc committees to look after any specific transitory questions. GATT Secretariat was the clearing house for the working of the Contracting Parties. It was situated at Geneva.

Constitutional Law of GATT

The GATT Agreement comprises the basic trade policy commitments of the contracting parties (CPs). GATT 1947 consists of 38 articles divided into Preamble and four parts.

The Preamble of the GATT consisting the objectives which include Raising the standard of living and the progressive development of the economies of the respective countries; Ensuring full employment and a large and steady growing volume of real income and effective demand; Better utilization of the resources of the world; Expansion of production and international trade; Recognizing that international trade as a means of achieving economic and social advancement; and Equalizing and lowering trade barriers.

Part I (Arts. 1 and 2): It deals with MFN and Binding Commitments.

Part II (**Arts. 3 - 23**): Contains substantive issues on commercial policy provisions which form the GATT's code of conduct for its CPs with regard to trade matters. Issues covered in this Part include National Treatment; Freedom of Transit, Anti-Dumping and Countervailing Duties, Valuation for Custom Procedures, Marks of Origin, Quantitative Restrictions, Balance of Payments, security exceptions, provisions relating to developing countries, consultation and nullification or impairment procedures etc.

Part III (**Arts. 24-35**): Contain miscellaneous and procedural provisions. Issues discussed in this Part include customs unions and free trade areas, joint actions by CPs, acceptance and entry into force, withdrawal of concessions, modifications of schedules, tariff negotiations amendments, withdrawal etc.

Part IV (**Arts. 36-38**): Deals with trade and development or issues concerning the developing countries. This Part was added in 1964 to combat trade-related problems of developing countries.

Core Principles of the GATT

The principles can be listed down as:

- a) Non-discrimination (Article I)
- b) Reciprocity
- c) Prohibition of quantitative restrictions and Protection through tariff (Article XI)
- d) Dispute Sottement (Article XXIII)

a) Non-discrimination

The principle of non-discrimination is an important aspect to the system of international trade. "Non-discrimination" denotes that the member country shall not discriminate between the members of GATT in the conduct of international trade. Once a member reduced a tariff on some commodity for any country, that reduction applies to all member countries. The whole concept of multilateral trading system is based on the principle of non-discrimination. It is also given that the nations should offer an equivalent exchange for the benefits they gain.

The principle has two components:

- Most favored nation (MFN) treatment (Article I)
- National treatment (Article III)

Most favored Nation Treatment: MFN treatment became an operational principle in the 19th century. MFN means that every time a member State extends or improves the benefits that it gives to one trading partner, it has to give the same "best" treatment to all other GATT Contracting Parties, so that they remain equal. Countries are to grant equal treatment – not more favorable or discriminatory – to goods and services from all Contracting Parties. Benefits tendered to one country have to be given in the same manner to other country, so that literally all of them remain 'most favored'. All are beneficiary to any moves towards lowering of trade barriers.

Hence, the MFN principle ensures that developing countries and others with little economic leverage are able to benefit freely from the best trading conditions whenever and wherever they are negotiated. Article I, II and IV of GATT says that a contracting party cannot treat a product/service of another country more favorably than the product/service of other GATT members.

Exceptions to MFN treatment: (exceptions have already been discussed in the previous chapter in detail)

• Article I paragraph 2 says that the contracting parties are permitted to continue with the receipt of any grant or preferences under any agreement/arrangement, which was entered into prior to the initiation of GATT.

- Article XXIV says that customs and free trade areas i.e., an association of nations with duty free treatment for imports from members and a common level of tariff for imports from members, are exempted from this treatment.
- Article XVII lays down provisions to the effect that if any special preferential arrangements for the benefit of developing country are entered into, such arrangements can be continued as such.

National Treatment: As maintained by this rule the Contracting parties/members must not accord discriminatory treatment between imports and similar type of domestic products (with the exception of the imposition of tariffs, which is a border measure). The vital intent behind this is to prevent countries from taking discriminatory measures on imports on the one hand, and to avert countries from offsetting the effects of tariffs through non-tariff measures. This also helps to maintain the balance of rights and obligations, and is an essential constituent for the maintenance of the multilateral trading system.

Under this principle the parties are not allowed to apply internal taxes or other internal charges, law regulations, affecting imported or domestic products so as to provide protection to domestic production. The standard shall not be higher than those imposed on domestic products between imported goods and similar type of domestic goods, or between imported goods and a directly competitive or substitutable product.

Exceptions to National treatment:

- Government Procurement allows governments to purchase domestic products preferentially. As a result, in the context of government procurement, the national treatment rule applies only between those who have consented to the Agreement on Government Procurement, and for others, the traditional exception is still in force.
- Domestic Subsidies allows for the payment of subsidies exclusively to domestic producers provided that it is not a violation of other related provisions.
- Members in the early stages of development can raise their standard of living by promoting the establishment of infant industries by taking measures that are inconsistent with GATT provisions after the required formality of consultation.

Tariff Concessions or Binding Commitments

What is a tariff? Tariff is a tax levied on imported goods which effectively raises the price of those goods. Tariffs reduce imports and increase domestic prices. The main object of GATT is the tariff concessions which are a commitment by a GATT CP to levy no more than a stated tariff on a particular item. This commitment is contained in a Schedule for that Party. The items in the Schedule are termed as 'Bound Items' and the individual commitment sometimes are termed as 'binding'.

The Schedules of GATT have resulted from various trade negotiations. These Schedules are incorporated by references into GATT under Article II. A tariff concession in GATT can be understood by two categories of GATT obligations:

- 1. Tariff concessions give rise to a specific series of obligations which are contained in Art. II of GATT.
- 2. A second category of GATT obligations are those that are general obligations which apply to trade in all products, not just the ones contained in Schedule.

Art. II of GATT is designed to protect the tariff bindings. Art. II.1 (a) of GATT embodies this objective by obligating WTO Members to accord tariff treatment no less favorable than that provided in their Schedules. Art. II.1 (b) provides that imported products shall be exempted from ordinary custom duties and all other duties and charges of any kind.

Tariff Modifications: GATT/WTO rules includes several provisions that allow members to modify their tariff Schedules through:

- 1. reopening negotiations after three years
- 2. negotiations in special circumstances
- 3. re-negotiations by developing countries
- 4. waiver
- 5. a new round of trade negotiations

Tariffs may also be modified upon the occurrence of any one of the following circumstances or events: -

- 1. Withdrawal of a WTO member
- 2. Compensatory modifications as a result of the formation or entry into a regional economic union
- 3. Invocation of the escape clause
- 4. Balance of payment difficulties
- 5. Sanctions

Prohibition of Quantitative Restrictions

Even though it is important for member countries to follow open and liberal trade policies, which permits them to protect domestic production from foreign competition, such protection is to be extended only through tariffs, which are to be kept at low levels. The principle of protection by tariffs is armored by provisions prohibiting member countries from using quantitative restrictions on imports. To this end, countries are prohibited from using quantitative restrictions, except in specified cases. Article XI of the GATT 1994 by and large prohibits the use of quantitative restrictions on the importation or the exportation of any product, by stating, "No prohibitions or restrictions other than duties, taxes or other charges shall be instituted or maintained by any Member..."

Quantitative restrictions is not defined anywhere. However, the Council for Trade in Goods, in a Decision of 1996 provides a list of quantitative restrictions. This list includes: prohibition, prohibition except under defined conditions, global quota, global quota allocated by country, bilateral quota (i.e., anything less than a global quota), automatic licensing, non-automatic licensing, quantitative restriction made effective through state-trading operations,

mixing regulation, minimum price triggering a quantitative restriction, and "voluntary" export restraint.

Exceptions to Quantitative Restrictions: There are, however, certain exceptions to this. They are:

- Export prohibitions or restrictions temporarily applied to prevent or relieve critical shortages of foodstuffs essential to the exporting Members (Paragraph 2 (a));
- Import and export prohibitions or restrictions necessary to the application of standards or regulations for the classification, grading or marketing of commodities in international trade (Paragraph 2 (b));
- Import restrictions on any agricultural or fisheries product, necessary to the enforcement of governmental measures which operate to restrict production of the domestic product or for certain other purposes (Paragraph 2 (c));
- General exceptions for measures such as those necessary to protect public morals or protect human, animal or plant life or health;
- Exceptions for security reasons;
- Restrictions to safeguard the balance of payments;
- Quantitative restrictions necessary to the development of a particular industry by a WTO Member in the early stages of economic development or in certain other situations;
- Quantitative restrictions necessary to prevent sudden increases in imports from causing serious injury to domestic producers or to relieve producers who have suffered such injury (Article XIX);
- Quantitative restrictions imposed with the authorization of the Dispute Settlement Body as retaliatory measures in the event that the recommendations and rulings of a panel are not implemented within a reasonable period of time (Article XXIII:2); and
- Quantitative restrictions imposed pursuant to a specific waiver of obligations granted in exceptional circumstances by the Ministerial Conference.

Role of GATT in Promoting International Trade

The main role of GATT in the international trade was regulating the contracting parties to achieve the purpose of the agreement which were reducing tariffs and other barriers, and to achieve the liberalization in international trade. The role was reflected in following aspects:

Firstly, GATT established a set of standard to guide the contracting parties to participate in international trade practices. GATT stipulated several of basic principle to conduct the contracting parties in international business, such as General Most-Favored-Nation Treatment (Article II), Non-discriminatory Administration of Quantitative Restrictions (Article XIII), and General Elimination of Quantitative Regulations (Article XI) and so on in the "GATT 1947". Every contracting party should obey these basic principles when they were involved in trade relations, otherwise they would be condemned, even be taken revenge by other parties. Besides this, contracting parties reached quite a little of agreements, and made some rules during pervious multilateral trade negotiations. For instance, Kennedy Round which

was started from May 1964 brought about the Anti-dumping Agreement. (WTO). These rules and agreements which were made in the multilateral rounds later become the basic principles which were accepted by all the parties, and stimulated the development of international trade.

Secondly, GATT reduced the tariff on the basis of mutual benefit, accelerate the trade liberalization after the World War II. GATT's major contribution was to reduce of tariffs by sponsoring "rounds" of multilateral negotiations. By sponsoring the multilateral negotiations, there was a significant reduce of the tariff. There were about 35% average tariff reductions in both Kennedy Round and Tokyo Round. Future more, in the Uruguay Round which was the most productive in the history of GATT multilateral negotiation, the contracting parties practiced the rules that kept cutting the tariff rate, there was an average tariff cut of 39% in this round of negotiation. By cutting the tariff rate, there is less trade barriers in doing international business which will mutual benefit the parties which participated, and promote trade liberalization.

Thirdly, GATT reduced the discrimination in tariff and trade which promoted to reduce other trade barriers. As stated in the Article II: schedule of concession in "GATT 1947", "Each contracting party shall accord to the commerce of the other contracting parties' treatment no less favorable than that provided for in the appropriate Part of the appropriate Schedule annexed to this Agreement." According to this statement, GATT regulate the contracting parties cannot increase the levels of tariff as their wish, but some countries used other non-tariff barriers to promote their protectionism.

Therefore, GATT claimed the contracting parties should not use other barriers to protect their own industries, it requested the reduction of the non-tariff barriers and quantitative restriction to make sure the benefit from the reduction of tariff not be erased by the non-tariff barriers. After Kennedy Round, the multilateral negotiation started to cover non-tariff barriers on goods. In 1968/1969, GATT compiled the "Inventory of Non-tariff Barriers" which listed more than 800 individual trade barriers in several volumes. Codes was one of the six agreements passed in the Tokyo Round, it established new rules on government procurement, technical barriers to trade, customs valuation, import licensing, antidumping, and subsidies and countervailing measures. The codes worked towards the goal which to eliminate the non-tariff barriers. Future more, the Uruguay Round also made the progress in decreasing and eliminating non-tariff barriers, especially in agriculture products. All these are good for eliminating the trade barriers, which towards the development of the international trade.

Fourthly, GATT protected the benefits of the developing countries to a certain extent to international trade. One of the basic objectives of GATT was that "raising of standards of living and the progressive development of the economies of all contracting parties, and considering that the attainment of these objectives is particularly urgent for less-developed contracting parties." (GATT 1947) In order to achieve this objective, GATT established some special measures for less-developed countries, such as provide tariff protect for specific industries, quotas which are with the purpose of balance of payment.

With the increasing number of developing countries jointed the GATT, there were more concern in the trade position and benefit of less-developed countries, more over with the developing countries' flight, so GATT established some measures for developing countries so that will benefit the less-developed countries in export-oriented trade. At the GATT ministerial meeting of 1963, it enabled the Contracting Parties to discharge the responsibilities towards the development objectives of the developing countries which led to add Part IV which entitled "Trade and Development" to the General Agreement. The new Part IV provided preferential treatment to the developing countries.

In the Uruguay Round which was "an important milestone for developing countries in their integration into the global economy", the participants agreed a number of rules which would benefit the developing countries, for example, agricultural liberalization, manufacture trade liberalization. There was a significant reduction of non-tariff barriers (especially export subsidies) in agriculture, it converted virtually all agriculture nontariff barriers into tariff. In manufacture trade, the tariff levied on manufacture products which imported from developing countries was reduced by 40 percent on average. All these measurements reduced the burden on the economy of developing countries, and had positives in the development of trade for less developed countries.

Finally, GATT acted as the "court of international trade", by providing a platform for contracting parties to negotiation and talk to settle disputes in international trade. One of the objectives of GATT was to settle the disputes between two or more parties. When two or more parties are involved in the international trade, it is inevitable that without disputes. Some of the disputes may be solved by the two parties themselves, however, some disputes could not be solved by themselves, without the help of the third party, and the disputes may be remaining unresolved for years. So, it needed GATT to solve those disputes which could not solve by parties themselves. Before it was replaced by WTO, in a certain period, GATT had become a legal mechanism to settle trade disputes among contracting parties, it provided a platform for contracting parties to settle disputes so that the trade conflicts and disputes can be solved immediately which would protect the benefit of both parties, and lay the foundation to achieve the main objective of GATT.

WTO - INTERNATIONAL TRADE NEGOTIATIONS AT A GLANCE

Round	Year	Objective
Geneva	1947	Inception of GATT
Annecy, France	1949	Tariff reduction
Torquay, England	1951	Tariff reduction
Geneva	1956	Tariff reductions and guidelines for addressing the trade and development needs of developing countries
Geneva, Dillon	1960-62	Negotiations relating to product-by-product basis and tariff concessions.
Geneva, Kennedy	1962-67	Multilateral trade negotiations
Tokyo	1973-79	Negotiations on non-tariff barriers like anti- dumping, customs valuation, government procurement and subsidies.
Uruguay	1986-94	*Establishment of WTO
		*Include Intellectual property
		*Include Services-trade

The sequence of negotiations of WTO is as follows:

- The Geneva Round, 1947 saw the formation of GATT. Negotiations relating to product-by-product, bilateral basis etc., were carried out.
- The Annecy Round, 1949 was primarily to extend the membership to other nations who were not a part of the Geneva conference.
- The Torguay Round, 1950-51 was a disappointment for the European nations as they felt that low-level tariff levels were disadvantageous to them.
- The Geneva Round, 1955-56 witnessed major tariff reductions and guidelines for addressing the trade and development needs of developing countries were addressed by way of Haberler report.
- The Dillon Round 1960-61 dealt mainly with negotiations relating to product-by-product basis and tariff concessions.
- The Kennedy Round, 1963-67 concentrated on multilateral trade negotiations. Negotiations on cutting were carried out fundamentally on an across the board basis.

- The Tokyo Round, 1973-79 saw for the first time negotiations on non-tariff barriers, which resulted in codes on anti-dumping, customs valuation, government procurement and subsidies.
- The Uruguay Round, 1986-93. The first six rounds concentrated mostly on reduction of tariffs. Tariff and non-tariff measures were dealt with in the Tokyo round. The most significant among them is the Uruguay round, which was initiated in September, 1986 and concluded on 15th September 1993.
- The Tokyo Round of trade negotiations contributed significantly to trade liberalization, it soon became evident that another round was needed to deal with areas not previously covered, including measures to adequately protect intellectual property rights (to combat trade in counterfeit products), distortions arising from trade-related investment measures (such as local-content and export-performance requirements), and trade in services (banking, insurance, tourism, etc., where national restrictions made it difficult for foreign service industries to operate in some countries and compete with national service providers), and to come to grips with rising protectionism and the closing of markets.

The Uruguay Round brought about the biggest reform of the world's trading system given that GATT was created at the end of the Second World War. It was relatively the largest trade negotiation ever, and most probably the largest negotiation of any kind in history. Most of the rounds dealt with tariff reduction. Later on focus was on anti-dumping, technical barriers, import-licensing procedures, government procurement etc. A most significant feature of the Uruguay Round was agreement by the world's key trading countries to completely eliminate tariff barriers in nine industrial sectors: paper, from pulp to all forms of made-up paper articles; steel; pharmaceuticals including finished medications of all forms; construction equipment; agricultural equipment; medical equipment; office furniture; toys; and whiskies, brandies and beer. In addition to the multilateral free-trade sectors, agreement was reached to harmonize tariff levels for chemicals and plastics. Participating countries will reduce their tariffs on products ranging from basic chemicals to cosmetics and photographic film to a common three-tier rate structure of free.

The post-Uruguay Round built-in agenda

Many of the Uruguay Round agreements set timetables for future work. Part of this "built-in agenda" started almost immediately. In some areas, it included new or further negotiations. In other areas, it included assessments or reviews of the situation at specified times. Some negotiations were quickly completed, notably in basic telecommunications, financial services. (Member governments also swiftly agreed a deal for freer trade in information technology products, an issue outside the "built-in agenda".) The agenda originally built into the Uruguay Round agreements has seen additions and modifications. A number of items are now part of the Doha Agenda, some of them updated.

There were well over 30 items in the original built-in agenda. This is a selection of highlights:

- 1996

- o Maritime services: market access negotiations to end (30 June 1996, suspended to 2000, now part of Doha Development Agenda)
- O Services and environment: deadline for working party report (ministerial conference, December 1996)
- o Government procurement of services: negotiations start

- 1997

- o Basic telecoms: negotiations end (15 February)
- o Financial services: negotiations end (30 December)
- o Intellectual property, creating a multilateral system of notification and registration of geographical indications for wines: negotiations start, now part of Doha Development Agenda

- 1998

- o Textiles and clothing: new phase begins 1 January
- o Services (emergency safeguards): results of negotiations on emergency safeguards to take effect (by 1 January 1998, deadline now March 2004)
- o Rules of origin: Work programme on harmonization of rules of origin to be completed (20 July 1998)
- o Government procurement: further negotiations start, for improving rules and procedures (by end of 1998)
- O Dispute settlement: full review of rules and procedures (to start by end of 1998)

- 1999

 Intellectual property: certain exceptions to patentability and protection of plant varieties: review starts

- 2000

- o Agriculture: negotiations start, now part of Doha Development Agenda
- Services: new round of negotiations start, now part of Doha Development Agenda
- o Tariff bindings: review of definition of "principle supplier" having negotiating rights under GATT Art 28 on modifying bindings
- o Intellectual property: first of two-yearly reviews of the implementation of the agreement

- 2002

Textiles and clothing: new phase begins 1 January

- 2005

Textiles and clothing: full integration into GATT and agreement expires 1
 January

Principles and Objectives of WTO

The key objective of WTO is to facilitate and promote world trade among its member states. Objectives are set out in the preamble to the Marrakesh Agreement. These include:

- Raising standards of living;
- Ensuring full employment
- Ensuring large and steadily growing real incomes and demand; and
- Expanding the production of and trade in goods and services.

These objectives are to be achieved while allowing for the most advantageous use of the world's resources in accordance with the objective of achieving sustainable development, and while seeking to protect and preserve the environment. The preamble also specifically mentions the need to assist developing countries.

The WTO aims to achieve its objectives by reducing existing barriers to trade and by preventing new ones from developing. It seeks to ensure fair and equal competitive conditions for market access, and predictability of access to all traded goods and services by employing certain well-laid principles.

The basic principles of the WTO are:

- Trade without Discrimination
- No Most Favored Nation (MFN) Treatment no special deals to trading partners, all members of WTO must be treated with the same status
- No National Special Treatment locals and foreigners are treated equally
- Free Trade
- Predictability through Binding promising not to raise tariffs is called binding a tariff and binding leads to greater certainty for businesses
- Promoting Fair Competition
- Encouraging Development and Economic Reform

These principles are the foundation of the multilateral trading system.

First level of the WTO structure:

The Ministerial Conference

It is composed of international trade ministers from all member countries. This constitutes the governing body of the WTO, responsible for setting the strategic direction of the organization and making all final decisions on agreements under its wings. The Ministerial Conference meets in any case once for every two years. Although voting can take place, decisions are generally taken by consensus, a process that can at times be difficult, particularly in a body composed of 136 very different members.

After the inception of the WTO there were four Ministerial Conferences.

First Ministerial Conference held at Singapore

The First WTO Ministerial Conference was held at Singapore between 9 and 13 December 1996. Ministers for Trade, Foreign, Finance and Agriculture from more than 120 World Trade Organization Member governments and from those in the process of acceding to the WTO participated in Conference. The Conference was the first since the WTO came into force on 1 January 1995. It included plenary meetings and various multilateral, plurilateral and bilateral business sessions. These examined issues related to

- Strengthening of WTO as a forum for negotiation
- Continuance of liberalization of trade within a rule based system
- Assessment of implementation of member's commitments under the WTO Agreements and decisions
- Review the ongoing negotiations and Work Programme;
- Examine developments in world trade; and
- Address the challenges of an evolving world economy.

The Implementation of the Uruguay Round Agreements

The following important decisions were taken regarding the tribulations of Least-Developed Countries and it was agreed to:

- A Plan of Action, including provision for taking positive measures, for example duty-free access, on an autonomous basis, aimed at improving their overall capacity to respond to the opportunities offered by the trading system;
- Seek to give operational content to the Plan of Action, for example, by enhancing conditions for investment and providing predictable and favorable market access conditions for LDCs'(less developed countries) products, to foster the expansion and diversification of their exports to the markets of all developed countries; and in the case of relevant developing countries in the context of the Global System of Trade Preferences; and
- Organize a meeting with UNCTAD and the International Trade Centre as soon as possible in 1997, with the participation of aid agencies, multilateral financial institutions and least-developed countries to foster an integrated approach to assisting these countries in enhancing their trading opportunities.

Agreements were arrived on at a number of provisions calling for future negotiations on Agriculture, Services and aspects of TRIPS, or reviews and other work on Anti-Dumping, Customs Valuation, Dispute Settlement Understanding, Import Licensing, Pre shipment Inspection, Rules of Origin, Sanitary and PhytoSanitary Measures, Safeguards, Subsidies and Countervailing Measures, Technical Barriers to Trade, Textiles and Clothing, Trade Policy Review Mechanism, Trade-Related Aspects of Intellectual Property Rights and Trade-Related Investment Measures.

Second Ministerial Conference held at Geneva

The Second WTO Ministerial Conference was held in Geneva, Switzerland between 18 and 20 May 1998. Consensus was arrived at on the basic telecommunications and financial services and the implementation of the Information Technology Agreement. The important decisions were arrived at on:

- A mechanism to ensure full and faithful implementation of existing multilateral agreements were to be set up
- Projectionist measures are to be rejected and open and transparent rule based trading system was to be accepted
- It was agreed that The General Council's work programme should encompass the following:

Recommendations concerning:

- The issues, including those brought forward by Members, relating to implementation of existing agreements and decisions;
- The negotiations already mandated at Marrakesh, to ensure that such negotiations begin on schedule;
- Future work already provided for under other existing agreements and decisions taken at Marrakesh
- Recommendations concerning other possible future work on the basis of the work programme initiated at Singapore;
- Recommendations on the follow-up to the High-Level Meeting on Least-Developed Countries;
- Recommendations arising from consideration of other matters proposed and agreed to by Members concerning their multilateral trade relations.

Third Ministerial conference held at Seattle

The Third WTO Ministerial Conference was held in Seattle and ended on December 1999. Major new negotiations were launched to further liberalize international trade and to review some current trade rules. Proposals regarding tariffs, anti-dumping, subsidies, safeguards, investment measures, trade facilitation, electronic commerce, competition policy, fisheries, transparency in government procurement, technical assistance, capacity-building and other development issues, intellectual property protection, and many other subjects, in addition to agriculture and services were discussed in the conference. A special deal to help least-developed countries gain easier access to richer countries' markets, and to develop further work on technical assistance to least-developed countries under an integrated framework which was set up by the WTO and a number of other organizations in 1997.

This conference turned out to be a failure since the developing nations jointly protested against the lack of transparency and imposition of the views of the rich on the poor countries in the negotiations. It was felt by the Asian, African and Latin American countries that their views were not cared for in the WTO. On the lighter side, it was even claimed by the

demonstrators that WTO is no more "World Trade Organization" but "Wrong Trade Organization"

Fourth Ministerial Conference held at Doha, Qatar

The Fourth WTO Ministerial Conference was held in Doha, Oatar from 9 to 14 November 2001. This is a much talked about conference among all the WTO conferences. It was once again confirmed that the multilateral trading system embodied in the World Trade Organization has contributed significantly to economic growth, development and employment throughout the past fifty years. It was decided to with the light of the global economic slowdown as a backdrop, to maintain the process of reform and liberalization of trade policies, thus ensuring that the system plays its full part in promoting recovery, growth and development. This was a round especially for the developing countries.

This round successfully launched a new round of trade and investment liberalization negotiations—the "Doha Development Agenda". For the past half-century the countries of the world have been able to achieve economic growth without resorting to the affluent countries as it was in the 1930s. This was possible due to the rising accomplishments of successive negotiation rounds. The launch of a new round with broad-based agendas and forward-looking efforts by Japan and other countries and regions is a significant achievement.

In Doha a move towards the resolution of implementation issues was made and some of the following concerns were addressed:

- Exclusion of labor
- Protection of interests in agriculture, services and industrial tariffs
- Postponement of negotiations on Singapore issue
- Safeguards in environmental negotiations
- TRIPS and public health
- Emphasis on developmental goals

The preamble of the Ministerial Declaration, speaks about the role trade plays in promoting economic development and the mitigation of poverty. It recognizes the particular problems of developing countries. It speaks of the need for more impartial sharing of the benefits accruing from trade liberalization. It promises to "seek to place their (developing countries) needs and interests at the heart of the Work Programme adopted in this Declaration." It even goes to the extent of stating that the Ministers ought to "attach the utmost importance to the implementation-related issues and concerns raised by Members and are determined to find appropriate solutions to them." The implementation issues are a set of problems within the WTO trade agreements that many countries of the South define as unfair to their interests and development needs and are seeking to change.

The major outcome or results of the Doha round could be summed up as

The decision to launch a new three-year round of WTO trade talks (the Doha agenda) with a joint focus on free trade and new forms of regulation, along with undertakings to

substantially increase support for capacity-building in the developing countries and help them to apply existing WTO agreements.

The decision to interpret the agreement on trade-related intellectual property rights (TRIPS) in a way favorable to the rights of its signatories to take public health protection measures; i.e., to enable countries to break patent law when faced by public health emergencies such as the AIDS endemic.

Derogation from WTO rules to allow the preferential trade agreements provided for in the Cotonou Agreement between the EU and the ACP (African, Caribbean and Pacific) countries.

(Note: Cotonou Agreement laid down efforts to consolidate peace and prevent and settle conflicts as part of the partnership and stressed the importance of civil society's contribution to development in the ACP countries, through implementation of the Agreement).

EU's four main objectives are to a certain extend realized. They are namely:

- The vista of further trade liberalization to get off the ground, economic growth and restore business confidence at a critical moment in the development of the global economy; reinforcing the regulatory nature of the multilateral trade system to be achieved by drafting under WTO auspices agreements on investment, competition, facilitating trade and public procurement;
- Introducing new rules to govern relations between WTO rules and international agreements on the environment;
- Meeting the concerns of the developing countries about implementation of the Marrakesh agreements and taking account of the development dimensions in all specific negotiations;
- Meeting the expectations of civil society about transparency, sustainable development and the environment.

The Doha ministerial declaration includes mandates to tackle the following issues, either through negotiations or work programs: implementation; agriculture; services; market access for non-agricultural products; TRIPs; trade and investment; trade and competition policy; transparency in government procurement; trade facilitation; WTO rules (including antidumping and subsidy rules); dispute settlement; trade and environment; electronic commerce; small economies; trade, debt, and finance; trade and transfer of technology; technical cooperation and capacity building; least-developed countries; and special and differential treatment for the WTO's poorer members.

Though this round was meant mainly for the developing countries, it turned out to be the opposite. More or less the whole of the Ministerial conference was devoted to issues in the interests of rich countries. The EU wanted to launch new free trade agreements on investment, government procurement, and competition policy and trade facilitation which in a way was harmful for the developing countries Though the Developing countries, bravely stood up to the bullying and threats of the rich countries in the end though they had no choice but to sign up.

The Fifth WTO Ministerial Conference to be held at Cancun, Mexico

The Fifth WTO Ministerial Conference will be held in Cancun, Mexico from 10 to 14 September 2003. The debate on concerns about transparency and procedures of negotiations will continue at Cancun, especially as it relates to the negotiations on agriculture and services, which began in early 2000. Liberalization of trade in services through the WTO General Agreement on Trade in Services (GATS) can be expected. The Cancun meeting is the deadline for member countries to decide on modalities for launching negotiations on the Singapore issues of investment, competition, transparency in government procurement, and trade facilitation.

Second Level Wings of WTO

Three bodies carry out the day-to-day work of Ministerial Conference, namely:

The General Council

The General Council is composed of senior representatives (usually ambassador level) of all members. It is responsible for overseeing the day-to-day business and management of the WTO, and is based at the WTO headquarters in Geneva. In reality, this is the key decision-making arm of the WTO for most issues. Several of the bodies described below report directly to the General Council.

The Trade Policy Review Body

The Trade Policy Review Body is composed of all the WTO members, and oversees the Trade Policy Review Mechanism, a product of the Uruguay Round. It periodically reviews the trade policies and practices of all member states. These reviews are intended to provide a general indication of how states are implementing their obligations and to contribute to improved adherence by the WTO parties to their obligations.

The Dispute Settlement Body

The Dispute Settlement Body constitutes all the WTO members. It oversees the implementation and effectiveness of the dispute resolution process for all WTO agreements, and the implementation of the decisions on WTO disputes. Disputes are heard and ruled on by dispute resolution panels chosen individually for each case, and the permanent Appellate Body that was established in 1994. Dispute resolution is mandatory and binding on all members. A final decision of the Appellate Body can only be reversed by a full consensus of the Dispute Settlement Body.

Third Level Wings of WTO-Councils

Third level has councils for each broad area of trade, services etc.

The Councils on Trade in Goods and Trade in Services operate under the mandate of the General Council and are composed of all members. They provide a mechanism to oversee the

details of the general and specific agreements on trade in goods (such as those on textiles and agriculture) and trade in services.

There is also a Council for the Agreement on Trade-Related Aspects of Intellectual Property Rights, dealing with that agreement and that subject area.

Fourth Level Wings of WTO-Committees

Fourth level has 11 committees dealing with specific subjects (such as agriculture, market access, subsidies, anti-dumping measures and so on).

The Committee on Trade and Development and the Committee on Trade and Environment are two of the several committees continued or established under the Marrakesh Agreement in 1994. They have specific mandates to focus on these relationships, which are especially relevant to how the WTO deals with sustainable development issues. The Committee on Trade and Development was established in 1965. The forerunner to the Committee on Trade and Environment (the Group on Environmental Measures and International Trade) was established in 1971, but did not meet until 1992. Both Committees are now active as discussion grounds but do not actually negotiate trade rules.

The Secretariat and Director General

The Head Quarters of WTO is Geneva, Switzerland. It has around 550 staff and is headed by a Director-General. The Director General, who is elected by the members, heads the Secretariat its annual budget is roughly 143 million Swiss francs. It does not have branch offices outside Geneva. Since decisions are taken by the members themselves, the Secretariat does not have the decision-making role unlike the other international bureaucracies. The Secretariat's foremost duties are to supply technical support for the various councils and committees and the ministerial conferences, to provide technical assistance for developing countries, to analyze world trade, and to explain WTO affairs to the public and media. The Secretariat also provides legal assistance in the dispute settlement process and advises governments wishing to become members of the WTO.

Benefits to Member Countries of WTO

By being members of WTO, the member countries are eligible to get the following benefits.

- The system helps promote peace
- Disputes are handled constructively
- Rules make life easier for all
- Freer trade cuts the costs of living
- Provision of more choice of products and qualities
- Trade free from disputes raises incomes
- Trade stimulates economic growth
- The basic principles make life more efficient
- Governments are shielded from lobbying

- The system encourages good government
- The system helps to promote peace
- The system contributes to international peace.
- Peace is partially an outcome of two of the most fundamental principles of the trading system.

Agreement establishing the WTO:

The agreement that created the WTO lays down every aspect of WTO in detail like the scope of the WTO, explaining the "single undertaking approach" which means that all multilateral WTO agreements are binding on all members (the plurilateral agreements, however, are only binding on those countries that signed them).

Articles mentioned in the Agreement Establishing the World Trade Organization

Salient contents of agreements

Article I	Establishment of the Organization
Article II	Scope of the WTO
Article III	Functions of the WTO
Article IV	Structure of the WTO
Article V	Relations with Other Organizations
Article VI	The Secretariat
Article VII	Budget and Contributions
Article VIII	Status of the WTO (a legal personality)
Article IX	Decision-Making (by consensus)
Article X	Amendments (by laying down the proposal before the Ministerial conference)
Article XI	Original Membership
Article XII	Accession
Article XIII	Non-Application of Multilateral Trade Agreements
	between Particular Members
Article XIV	Acceptance, Entry into Force and Deposit
Article XV	Withdrawal from the agreement
Article XVI	Miscellaneous Provisions

GATS

Overview of the GATS

The GATS, which was also negotiated during the Uruguay Round, sets out a comprehensive framework of rules governing trade in services. It sets out a set of basic rules, a clear set of obligations for each member country and a dispute-settlement mechanism to ensure that the rules are enforced. The GATS applies to all service sectors and all forms of trade in services, though with adjustments and exceptions tailored to the type of service. The types of services covered include telecommunications, insurance and financial services, research and development services, computer and information services and professional services. Professional services include legal services, as well as accounting services, engineering services, architectural services and so on.

The forms (or "modes") of trade in services are:

- Cross-border trade in services: a firm deal with a client in another country (e.g. electronically) without crossing the border;
- Consumption abroad: a client travels to a firm's country of operation to consume a service:
- Commercial presence: a firm establishes an operation in the market of another country; and
- Temporary movement of a natural person: a firm travel to the client's country of operation to provide the service.

The GATS has two basic components. The first component establishes a framework for regulating trade in services and contains a set of general multilateral rules that apply to national regulations governing such trade. This component also contains a series of annexes that address issues in certain service sectors. The second component consists of a set of schedules which lists specific commitments that apply to the service sectors that Members have agreed to include in their schedules.

a. Most Favored Nation Obligation

The unconditional Most Favoured Nation (MFN) obligation is a core general obligation of the GATS: each service supplier from a Member country must receive from other Members treatment no less favorable than is accorded to other Foreign Service suppliers. This obligation applies to trade in all service sectors covered by the GATS, regardless of whether the Member has undertaken specific commitments in a sector.

The Annex provided Members with a one-time opportunity at the entry into force of the GATS to unilaterally create MFN exceptions with respect to other Members. Without such an exception, service providers from all Members must receive MFN treatment.

b. Specific Commitments:

In addition to creating general obligations, the GATS also provides a legal basis for negotiating the multilateral elimination of barriers to trade in services. The GATS

negotiations are designed to improve market access and to reduce discrimination against service suppliers based on nationality.

- i. Market Access: Market Access is a negotiated right and obligation under the GATS. A Member is obliged to provide market access to services suppliers from other Members only in those sectors which the Member has included in its schedule.
- ii. National Treatment: National Treatment is a second negotiated right and obligation under the GATS. If a Member includes a service sector in its schedule of National Treatment obligations, that Member must "accord to services and services suppliers of any other Member . . . treatment no less favourable than that it accords to its own like services and services suppliers." This obligation essentially prohibits discrimination against foreign providers of services.

The GATS and the Legal Services

The GATS was signed in December 1993 and is one of several agreements signed in conjunction with the agreement creating the WTO. To date, 148 countries have signed the GATS. The GATS applies to legal services. This means that once a country signs the GATS; its regulation of legal services is automatically subject to certain provisions of GATS. For example, all GATS signatories are subject to a transparency requirement, which specifies that all relevant measures be published or otherwise publicly available.

In addition to these general requirements, most countries have included legal services on their Schedule of Specific Commitments, which means that legal services are subject to many additional provisions of GATS. For example, if a country lists legal services on its Schedule, then its regulation of legal services not only must be transparent, but must also be administered in a reasonable, objective and impartial manner.

Although most countries included legal services on their Schedules, thus making them subject to many GATS provisions, most countries specifically omitted from coverage their current set of regulations. This is because of Article VI, which provides: With a view to ensuring that measures relating to qualification requirements and procedures, technical standards and licensing requirements do not constitute unnecessary barriers to trade in services, the Council for Trade in Services shall, through appropriate bodies it may establish, develop any necessary disciplines. Such disciplines shall aim to ensure that such requirements are, *inter alia*: (a) based on objective and transparent criteria, such as competence and the ability to supply the service; (b) not more burdensome than necessary to ensure the quality of the service; (c) in the case of licensing procedures, not in themselves a restriction on the supply of the service.

India and the GATS

The process of Globalization has led many countries in the world to examine the question of regulating and the entry of foreign legal consultants and to see where such entry should be made subject to any restrictions designed to protect the domestic legal professions. With the liberalization of Indian economy since early nineties, and the globalization policy following

the WTO, many multi nationals and foreign corporations are increasingly entering India. Foreign financial institutions and business concerns are also entering India in a fairly large number. They require to be advised on Indian laws affecting them. They need assistance of lawyers in drawing up agreements, contracts and other business ventures. They also require their services to appear for them in courts and tribunals in India.

The attack on foreign legal participation in India started with court proceedings in the Bombay High Court by "Lawyers' Collective" against Ashurst of the UK and White & Case of the US, the former based in New Delhi and the latter in Mumbai. It was alleged that instead of merely operating as liasion offices as permitted by the Reserve Bank of India, these firms were indulging in active legal practice, in breach of the statutory requirements. These firms admitted that while not actively practicing in courts, they were advising and assisting non-Indian clients and Indian clients by drafting documents, conducting negotiations, reviewing and providing comments on documents, advising clients on international standards and customary practices relating to clients' transactions - the Bombay High Court at the interlocutory stage has expressed the view that "practice of the profession of the law" would include legal practice outside the court (as done by these firms) - if confirmed, it would mean that representatives of these firms would have to enroll under the Advocates Act. Even the Reserve Bank has issued show cause notices alleging breach of the "liasion office" license.

The 15th Law Commission of India, headed by Shri Justice B.P. Jeevan Reddy, has taken up a study on entry of foreign legal consultants and liberalisation of legal practices in India in keeping with the guidelines evolved by the International Bar Association (IBA), and General Agreement of Trade in Services (GATS), which is an organ of World Trade Organisation (WTO). The study by the Law Commission is intended to introduce the elements of competition, quality of services and satisfaction in the legal services and their clients in the country in tune with the emerging globalisation of Indian economy where competition and quality would, ultimately, become inescapable. Law Commission of India in 1999 prepared a review paper of the Advocates Act and suggested a series of radical measures (and accompanying amendments to the statute) - these include -

- to remove the existing barrier based on citizenship or nationality for regulating the legal profession and providing legal services in India
- to provide a legal framework for regulating the profession in the context of emerging globalization of legal services and to provide full and unlimited licensing to Foreign Legal Consultants (FLCs) and Foreign Legal Firms (FLFs) in India
- to recognize foreign law degrees and to enroll foreign nationals holding such degrees as Advocates in India
- to promote larger partnership of lawyers
- to provide for multi-disciplinary partnerships between lawyers and non-lawyers
- to have a positive approach to the internationalizing of trade in legal services

The law governing and regulating the legal profession in India is the **Advocates Act, 1961**. Provisions relevant to the present discussion are -

- Section 24 provides that only an Indian Citizen has the right to practice and be enrolled as an Advocate in India
- A proviso to the section provides that a national of any other country may be admitted as an Advocate, if citizens of India are permitted to practice law in that other country ("reciprocity")
- Section 47 clarifies that the Bar Council of India may prescribe conditions subject to which foreign qualifications in law obtained by "foreigners" (and not Indian Citizens) shall be recognized for admission as an Advocate
- Section 11 of the Companies Act, 1956 prevents partnership firms of more than 20 partners professionals do not enjoy any exemption from this requirement; neither are they able to function as a company or limited liability partnership; solo practitioners and small formal/informal associations abound
- Multi-disciplinary practices are not allowed

India as a founder member of the WTO and GATS has the imperative that the restructuring of the regulatory regime, keeping in mind the GATS and the consequent imminent changes, should be done after thorough study and analysis, in a very careful and detailed manner. In India, in particular, e.g., it is felt that the following points should be kept in mind while restructuring a proper regulatory regime:

- 1) There is a distinction between those foreign lawyers who want to practice in Indian courts and those who want to work primarily as Foreign Legal Consultants.
- 2) Most foreign firms are interested in non-litigation legal consulting business.
- 3) Any regulatory regime must be decided after consulting the Bar as well as the various Bar Associations, Bar Councils, Law Officers and leading law firms, and must address the following issues.
 - a) Reciprocity rights of the Indian lawyer in the foreign country's jurisdiction.
 - b) Discipline control and maintenance of ethical standards as prevailing in India.
 - c) Undertakings that the FLCs will not practice Indian law or employ.

The Bar Association of India has passed resolutions relating to this, keeping in mind the Preamble in the GATS:

- a) that a task force should be set up to clearly define India's "National Policy Objectives" in relation to legal services; and
- b) That appropriate guidelines and norms for regulatory entry of foreign lawyers/firms for rendering legal services in India be formulated.

The Bar Association is of the further view that the new regulatory regime should ensure:

- 1) A general reciprocity of rights, and non-discrimination;
- 2) Foreign lawyers/firms are subject to the same disciplinary jurisdiction as Indian lawyers; and
- 3) Greater opportunities for the future development of the entire legal profession in India.

Multi-Forums of Shipping Related Negotiations and the Need to Harmonize:

Although they are two independent organizations, the WTO and the UN actively connect to each other. The emergence of the world trading system can be traced back to 1947. In that year, the UN's Conference of Trade and Employment adopted the Havana Charter for the International Trade Organization (ITO) that aimed to establish a multilateral trade organization. Although the ITO never came into force, the Havana Charter was partially integrated into the WTO. Furthermore, the cooperation between the two organizations is deeply rooted in the WTO agreements. In general, the legal basis of the WTO-UN relation is governed by the "Arrangements for Effective Cooperation with Other Intergovernmental Organizations-Relations between the WTO and the UN." Additionally, the GATS and GATT, two cardinal components of the WTO Agreements, specify collaborative relationships with other international organizations, which provide the legal basis for the cooperation with the UN and its specialized agencies on shipping.

In considering the multi-forum maritime transport, it is worthwhile to boost further cooperation. There are a number of UN specialized agencies handling shipping issues. The United Nations Conference on Trade and Development (UNCTAD), Organization for Economic Co-operation and Development (OECD), and United Nations Economic and Social Council (ECOSOC) have published statistical data on the shipping industry for years. These are considerable resources of background information for further GATS-based maritime transport negotiations.

The WTO possesses two advantages over other forums on reinforcing harmonization of shipping regimes. This study focuses on the sea cargo regime and UNCITRAL, but the proposed way of cooperation in this paper might be extended to other respective shipping areas. First, the nature of legal documents administered by UNCITRAL and by the WTO is dramatically distinct. Most WTO agreements (including the GATS and TRIPS) are multilateral and legally binding for all members, but the UNCITRAL-administrated conventions can be regarded as plurilateral agreements. Unlike multilateral agreements, the category of plurilateral agreements is optionally applicable to UNCITRAL negotiating countries on a voluntary basis, and is only binding for those members who ratify the treaties. Moreover, UNCITRAL has also adopted additional legislative techniques in modernizing and harmonizing the law of international trade. Several different types of legislative texts are used on the basis of its mandate, including conventions, model laws, legislative guides and model provisions. Among these legislative texts, only the conventions are binding. As the maritime transport regimes, The Hague, Visby, Hamburg and Rotterdam Rules do not automatically apply to their negotiating countries, and their applications reply on ratifications.

In contrast, the second category of multilateral treaties consists of agreements that are compulsorily binding on all members, and WTO agreements mainly belong to this category. Thus, a WTO-based maritime transport regime is legally binding and likely to be applicable to all WTO Members. Due to all WTO Agreements being a single package, both substantive norms within the GATS and its procedural enforcement system will apply to all Members. The nature of a WTO administrated maritime transport annex is if a uniform sea cargo regime

is part of the annex, it is a multilateral agreement and is significantly different from The Hague, Visby, Hamburg, and Rotterdam Rules.

The WTO has built up the widest coverage of Members and application of scope. Governing over 161 Members, the WTO engages in over 90 percent of all international trade in goods and services. It is comprehensive in the composition of its membership, including all developed countries and almost all developing countries. There are few other legal frameworks that are better at promoting the multilateral negotiations on the trade of goods and related maritime transport services. The WTO framework covers the broadest spectrum of Members and almost all stages of development of economic entities from developed nations to less developed countries. Therefore, a WTO-based maritime transport agreement will likely become binding for all WTO Members globally.

Due to its minimal political image, the WTO has earned great prestige over the developing world. In order to establish the WTO as a unified institution under the WTO Agreements, there were a variety of clearly unanswered issues after the conclusion of the Uruguay Round of negotiations. These issues entailed further negotiations on services and greater integration of developing countries, as well as monitoring of the WTO rules to ensure fair treatment of these countries the problem of integrating the "economies in transition" into the WTO system, and facing up to the problem of "state trading" entities.

Harmonization: WTO's Liberalization and UN's Unification

Both the UN and the WTO aim at the harmonization of the maritime transport regime, but each does so with different focuses. The UN stresses the unification of the sea cargo regime. As seen from the full name of the Hague Rules, the UN harmonization is targeted at establishing and updating universal rules for a wide range of countries. The WTO emphasizes Members' deeper commitment in existing sectors to achieve further liberalization.

Meanwhile, the WTO does not intervene in its Members' regulatory autonomy over quality control of services supplied and the standardization of the service regulation worldwide. Both the WTO and the UN try to adjust diverse levels of domestic regulations to universal levels set by them. The UN's unification and the WTO's harmonization are both targeted towards global application and the level of standardization affects whether the scope of application could become global or not. Therefore, the harmonization of the UN and of the WTO faces a question: which levels of the standardization should be imposed on the UN's unification and the WTO's liberalization? In general, the standard of unification on limiting freedom of contract should be relatively low; in contrast, the standard of the WTO's liberalization seems to be higher.

Nonetheless, the standardization is harmonized at different levels under unification and liberalization. The level of unification of the different cargo regimes is balanced between low and high levels and regards the scope of application and liability. Additionally, the level for liberalization sets the standard at a relatively high-level requiring removing unnecessary regulations, but the high standards are achievable through progressive liberalization. Moreover, both targets of liberalization and unification can be achieved under the WTO

framework. According to GATS Preamble, the WTO's liberalization of shipping markets can be achieved without prejudice to UN's unification of the sea cargo regime. In practice, TRIPS proves that the WTO is capable of unifying different domestic regulations and liberalizing markets in one go.

MODULE-III

INTERNATIONAL TRADE IN TELECOM SERVICES

TRADE IN TELECOMMUNICATIONS SECTOR

International trade in telecommunications can be defined as sales of telecommunication equipment or services that cross national borders. The import and export of telecommunication *equipment* conforms well to our traditional understanding of trade as buying and selling. Global exports of telecommunication equipment reached US\$ 58 billion in 1995, an increase of more than 20 per cent above the previous year and a more than twofold rise since 1990. Exports now account for about one-third of the total telecommunication equipment market and that share continues to rise steadily. This boom has been largely driven by the growth in demand for telecommunication services which in turn is driving the construction and modernization of networks.

Until recently, opportunities for telecommunication *services* trade had been more limited than for equipment. Telecommunication service trade includes transactions that cross national borders, such as telephone calls or electronic mail sent from one country to another. It also covers foreign investment, such as the purchase of telephone companies by foreign investors or joint ventures between local and foreign partners to establish new telecommunication service companies. But what exactly is being bought and sold? One way of answering the question is to look at the ways by which services can be traded: cross-border supply, commercial presence, consumption abroad and movement of staff.

Of these four delivery methods, *cross-border* provision is by far the most important. International telephone calls have risen from under 4 billion minutes in 1975 to over 60 billion in 1995, a growth rate of 15 per cent a year. In 1995, international telephone calls generated US\$ 53 billion in retail revenues which corresponds to 8.7 per cent of the global telecommunications service market.

The second most important way in which telecommunication services are traded is through *foreign investment* to establish a commercial presence. Historically, opportunities for foreign investment in the telecommunication services sector have been limited by the fact that most countries had state-owned monopoly carriers. This era is now coming to an end. Since 1984, 44 Public Telecommunication Operators (PTOs) have been privatized raising US\$ 159 billion. About one-third of this investment has come from outside the home country of the privatized operator. Foreign capital can be raised either though a share offering or, more often, through the sale of a minority share of a PTO to a strategic partner. As well as privatizations, there are an increasing number of opportunities for foreign investors to establish foreign subsidiaries or to combine with others in joint ventures. The mobile communication market has proved particularly fruitful as countries have licensed additional operators and introduced new services.

Finally, a small but growing part of telecommunication service trade is derived from either the movement of customers or the movement of staff outside their home country. While difficult to quantify, available evidence suggests this form of trade is already significant and growing fast. Examples include mobile roaming and telecommunication consulting activities.

Why does Telecommunications trade matters?

Trade in telecommunications matters for two main reasons. First, because the telecommunication industry is a significant and growing sector in its own right. In terms of market capitalization, the telecommunication industry ranks third in the world behind health care and banking, while telecommunication and office equipment was the fastest growing sector of merchandise exports during 1995. Second, because telecommunications plays an important role for other industries. Information, and the facilities for accessing, processing, and disseminating it in electronic form, have become a strategic resource as important as land, labour and capital. Thus, telecommunications has a dual role as both a traded product and service and as a facilitator of trade in other products and services.

Looking first at telecommunications as an industry, the sector achieved combined sales of US\$ 788 billion in 1995, of which three-quarters came from services and one quarter from equipment sales. The cyclical upturn that began in 1992 has continued and accelerated. During 1995, sales of telecommunication services grew, in real terms, by 7 per cent. There is little sign that this rate of growth is slowing down, with the telecommunication sector growing at twice the rate of the global economy.

It is not hard to find the causes of this growth. During 1995, fixed line telephone networks added 45 million new lines worldwide (compared with 38 million during 1994). Equally, the mobile communications sector continued its rapid growth in 1995, adding 33 million new subscribers worldwide (19 million in 1994). If we extrapolate forward the trends of the past five years, it is likely that by 1998, the telecommunication sector will be a one trillion-dollar industry worldwide; and, by the turn of the century, the combined base of fixed line and mobile telephones will be around one billion.

The industry is growing stronger as well as faster. In 1995, the average expenditure by telecommunication users rose by almost US\$ 100 to US\$ 905. Equally, the volume of international traffic which they generate rose by 5 per cent to 89 minutes each per year, providing a further boost to global trade and tourism. Furthermore, the telecommunication sector is at the heart of a much larger industry—information and communications, or infocommunications—worth some US\$ 1'370 billion in 1995. The convergence of the telecommunications sector with the computer and broadcasting worlds is creating new synergy, most evident in the growth of the Internet, which continues to double in size every year. At the start of 1997, there were more than 16 million host computers connected to the Internet and more than 50 million users. The significance of the Internet lies not so much in what it is, but what it could become. It can be regarded as the prototype of a global information infrastructure which will lay the platform for the electronic commerce of the 21st century.

Who benefits from telecommunication trade liberalization?

So to the third question: what are the benefits of trade liberalization? Freer trade in telecommunications promises to deliver at least three economic gains: new and improved products and services, lower prices and additional investment. Open trade in

telecommunication services should result in more competition, lowering prices for most businesses and for many consumers and providing both with a choice of different service providers.

Probably the clearest evidence comes from the market segment where competition is currently the most keen: in international telephone services. Those markets where direct competition is permitted have achieved higher rates of growth than countries that have retained a monopoly. For developed economies, this difference is significant; competition has raised the growth rate of traffic per subscriber from 5.6 per cent to 9.3 per cent per year since 1990. However, for emerging markets the difference is much more striking: over the same period competitive markets grew their international traffic per subscriber by 11.7 per cent per year compared with just 5.2 per cent per year in monopoly markets. This suggests that the potential benefits of trade liberalization might actually be *greater* for emerging markets than for developed ones.

Why should this be so? One part of the answer is because of unmet demand. Some 43 million people are on registered waiting lists for telephone connection in emerging markets and the average waiting time is more than a year. By introducing new investment in the market, waiting lists can be sharply reduced, as has been the case in developing markets that have privatized their public telecommunication operators at the start of the 1990s.

What about the potential costs of trade liberalization? Some governments are afraid that they will lose the ability to control entry and ownership in their domestic markets. The truth is that, at the international level, governments have practically lost the power to dictate who can provide services. For example, the development of alternative calling procedures such as callback has occurred at a much faster rate than had been expected over the past few years. As a result, almost all markets are now open to some degree of competition.

By making commitments to open their market, governments are merely acknowledging what is already happening. In particular, it is necessary to reflect on the changing role of government, from being a direct player in telecommunications to a policy maker and regulator. Even though their direct operational influence may be greatly diminished, there will be more work for governments to do under a competitive market environment than was the case under monopoly service provision. That is because existing market players as well as potential new entrants will be looking for clear guidance on what sort of regime will be established for issues such as interconnection, numbering, universal service obligations and tariff policy.

Towards a multilateral trade framework

A new paradigm is emerging for international trade in telecommunications. The old paradigm, which might be loosely described as "inter-national" telecommunications, was based on bilateral relations between countries. The monopoly operators in those countries collaborated in the joint provision of international services. This model is now breaking down, not so much because the system is not working, but rather because it now fails to capture the full picture. A new pattern based on global competition is emerging. It recognizes

that trade in telecommunication equipment and services now takes place in a multilateral environment in which the majority of trade relationships include multiple intermediaries between buyer and seller. We are moving from a world of one-to-one relations to a world of many-to-many. It is not nations that trade with other nations, but companies and individuals that conduct trade with each other.

What will be the impact of the market opening moves agreed at the World Trade Organization? The agreements are significant for two main reasons. First, because the countries which have made offers or commitments account for such a large part of the total world market. The 69 governments that made offers under the negotiations on basic telecommunications services (Geneva, 15 February 1997) constitute some 94 per cent of the global market for telecommunication services. Similarly, the 28 governments that signed the Ministerial Declaration on Information Technology products (Singapore, December 13 1996) account for 84 per cent of global telecommunication equipment exports. Second, because the agreements have been negotiated as part of a multilateral treaty, the offers and commitments are binding on governments and practically irreversible.

For many telecommunication users, the transition to a multilateral trading system will bring benefits in terms of greater choice and lower prices. For the majority of carriers, there will be significant benefits in terms of creating new market opportunities and a more level playing field. The goal is to extend the multilateral solution in which all countries move forward together and in which all benefit, not just those carriers with market power. Only then will the benefits of global competition be extended to all the world's inhabitants.

THE INCLUSION OF TELECOMMUNICATIONS SERVICES IN THE WTO

In 1986, at the start of the Uruguay Round, there were few precedents and little discussion of liberalization in telecommunications. By way of illustration, the United States was in the aftermath of the AT&T break-up, and the EC had not taken any internal liberalization measures yet, and national telecommunications operators ("TOs") were still firmly entrenched throughout the EU (with the exception of the UK). The European Commission did not publish its first policy paper on the telecommunications sector until 1987, with proposals for a partial liberalization. There is reason to ask then why telecommunications were included in the trade policy framework.

First, the WTO provided a *suitable forum* for negotiations. In 1986, a number of developed countries felt that the traditional forum for international telecommunications negotiations, the International Telecommunications Union ("ITU"), was not an appropriate place in which to discuss liberalization initiatives. The vested interests in the ITU, *i.e.*, governments, most of which control the national TO, were used to discussing technical issues, such as radio frequency allocation, in a spirit of cooperation. Some felt that the introduction of competition, and the advent of many private suppliers of telecommunications services, did not fit into this tradition.

Developed countries also perceived those developing countries had too much influence in the ITU. In view of the ITU's role in discussions on the North South dialogue and the "New

International Economic Order" in the 1970s, developed countries did not expect that deregulation and liberalization could become a high priority for the ITU.

Second, it was felt by developed countries that the *negotiating techniques* of the GATT were appropriate for the objectives they pursued: the global framework would give them more opportunity to achieve results, since cross sectoral deals might be struck.

Having unsuccessfully resisted the inclusion of services in the Uruguay Round, the developing countries did manage to put services on a separate track in an attempt to prevent cross-linkages between traditional GATT issues and services. In fact, there were not many trade-offs amongst different service sectors. These circumstances undoubtedly led to more protracted negotiations on telecommunications. As explained below, no agreement on basic telecommunications could be reached by 1994 for signature as part of the WTO Agreement. This issue was accordingly entrusted to an *ad hoc* negotiating group. While an agreement was ultimately signed, no benefits could therefore be derived from including telecommunications in a global trade round.

Third, the original GATT appeared to provide a *tested framework* for negotiations on the liberalization of telecommunications services. The GATT framework for goods contained some fundamental liberalization principles (MFN, national treatment, tariff bindings, etc.). These tested principles might provide a road map to the telecommunications negotiators and could reinforce the commitments ultimately agreed.

Fourth, the proponents of including telecommunications in the Uruguay Round were attracted by the dispute settlement procedures available in the GATT. While these procedures could be criticized, they were at least used and thus helped to further trade liberalization. In contrast, the dispute settlement provisions of the ITU have not been used once since 1947.

A BRIEF OVERVIEW OF THE WTO TELECOMMUNICATIONS NEGOTIATIONS

The WTO telecommunications negotiations lasted from 1986 to 1997. In the first few years, discussions centered on the outlines of a general agreement on services.

I. From 1986 to the Conclusion of the GATS in 1994

Sectoral discussions on telecommunications began in 1989. Since the United States was the most advanced country in terms of telecommunications liberalization at the time, it will come as no surprise that their perspective and their agenda initially dominated the talks. For instance, as will be discussed further below, at the insistence of the United States a distinction between basic and value-added services was introduced to structure the discussions. Negotiations on value-added or enhanced services went relatively easily.

However, difficulties arose with respect to basic telecommunications services. On the one hand, many U.S. operators were eager to be able to enter foreign markets and invest abroad, since they felt comparatively more advanced than their foreign competitors. On the other hand, the United States was reluctant to open its market, the largest in the world, as long as other markets were dominated by legal monopolists which could thwart the efforts of U.S. fi

rms abroad and also potentially engage in anti-competitive practices affecting the U.S. market (at least the market for international communications). The United States argued that it was not going to open its market as long as its telephone operators (AT&T, etc.) were not granted reciprocal access to markets of similar size to the United States. This became known as the issue of *critical mass*: without a sufficiently large number of market access commitments from its trading partners, the United States was unwilling to make a move.

In the end, the Uruguay Round produced a framework agreement on trade in services. WTO Members gave specific market access commitments in a variety of sectors. With respect to telecommunications services, a number of countries made commitments, but they were mostly limited to so-called value-added services only. No agreement was reached on basic telecommunications. A Decision on Negotiations on Basic Telecommunications was taken at the end of the Uruguay Round, whereby a Negotiating Group on Basic Telecommunications was created ("NGBT") with a mandate to conclude an agreement by April 30, 1996. WTO Members agreed to a standstill during the upcoming round of telecommunications negotiations; they would not seek to improve their negotiating position or leverage by the introduction of new measures. An Annex on Negotiations on Basic Telecommunications was also attached to the GATS in order to extend the time limit for filing exemptions to Article II of the GATS (most-favored nation treatment) in the telecommunications sector until the end of the telecommunications negotiations.

II. The 1996 Breakdown

Negotiators were fairly relaxed about this seemingly generous extension of the deadline. They realized that rapid technological developments were helping to undermine national restrictions. By simply waiting, they felt they were still making progress towards liberalization.

Nevertheless, telecommunications negotiations broke down in the spring of 1996, when the United States bowed out. The United States explained their refusal to conclude an agreement by claiming that a critical mass of market access commitments, notably from developing countries, had not been reached.

Members of the NGBT agreed however to extend the deadline in order to try to salvage the negotiations. The effect of both the Decision on Negotiations on Basic Telecommunications and the Annex on Negotiations on Basic Telecommunications were extended in substance to February 15, 1997 by the Decision on Commitments in Basic Telecommunications of April 30, 1996. The NGBT was turned into the Group on Basic Telecommunications ("GBT").

In contrast to the NGBT, where some countries were participants and others observers, the GBT was open to all WTO Members as participants.

III. The 1997 End Game

Between April 1996 and the new deadline of February 15, 1997, a lot of effort was spent on improving existing offers and obtaining new offers. The United States and the EU were particularly looking for concessions in the Asia-Pacific region. As a result of this pressure,

but also because of their own perception that deregulation would be in their own interest, several countries in the region presented revised or new liberalization offers. In November 1996, the United States and the EU also improved their offers, as further enticement to the others.

At the end, 32 of the 34 offers that had been tabled in April 1996 were revised, and 21 new offers were submitted, bringing the total number of schedules of commitments to 55, accounting for 69 countries (the fifteen countries of the EU being included in a single schedule). On February 15, 1997, an agreement was reached between the participants on these commitments. The 55 schedules were attached to a brief document which became the Fourth Protocol to the GATS. The Fourth Protocol entered into force on February 5, 1998.

THE COMMITMENTS RELATING TO TELECOMMUNICATIONS SERVICES IN THE WTO

The results of the telecommunications negotiations must be seen against the background of the GATS, as described in other Chapters, in particular the scheduling techniques peculiar to the GATS ("horizontal" and "vertical" commitments, modes of supply, listing of restrictions in schedules, etc.).

I. The Specific Commitments Concerning Telecommunications Under the GATS

This section reviews the commitments already contained in the GATS at the time the WTO Agreement was signed (1994), followed by the commitments of the Fourth Protocol of February 15, 1997. First, however, it is important to explain the distinction that has been drawn between "basic" and "value added" telecommunications.

A. The Distinction Between Basic and Value-added Telecommunications

a distinction between "basic" As preliminary matter, and "value-added" telecommunications has unfortunately been introduced in the GATS frame work. "Basic" and "value-added/enhanced" telecommunications are essentially U.S. regulatory categories introduced for the purposes of delineating FCC jurisdiction in the course of the computer inquiries. In the United States, basic services are defined as "the . . . offering of transmission capacity for the movement of information", while enhanced services are "any offering over the telecommunications network which is more than a basic transmission service". The FCC exerts jurisdiction under Title II of the Communications Act over the former but not the latter. The distinction is thus a technical one, whereby basic services are those where the service provider offers little more than a clear communications path to the customer. It does not reflect any inherent difference between the two groups of services. The distinction is rather a way to draw a line between what the FCC perceived as a competitive sector and one that still required regulation.

The distinction between basic and value-added services is not present to the same extent in all telecommunication's regulatory frameworks. In the EC, this distinction is no longer made.

In the original outline for services schedules, telecommunications services were divided into fifteen sub-headings. These are still reflected in the sched ules, as can be seen in the model schedule in the Annex. Later, the distinction between basic and value-added services was made by separating the sub-headings into two groups for the purposes of negotiation, the latter being treated in the original GATS, the former being left for further negotiations within the NGBT (and later the GBT). The Decision on Negotiations on Basic Telecommunications defines "basic telecommunications" as "telecommunications transport networks and services", a definition which comes closer to the U.S. approach. NGBT and GBT participants were, however, unable to agree on a more precise definition of basic services, and in fact did not incorporate a definition of basic services in their respective schedules. Whilst the United States uses the sub-headings as an exhaustive list of what is covered under "telecommunications services", the EC and its Member States see these sub categories as illustrations of a broader definition, which is included at the beginning of their commitments.

Now that commitments have been made for both basic and value-added telecommunications, a full set of commitments is present and there is no need to distinguish further between the two categories if no substantive consequences are attached to the distinction. Nevertheless, the basic/value added distinction appears in the Reference Paper agreed by the GBT. This distinction stems from the idiosyncrasies of U.S. telecommunications regulation, may cause complications, and may have outlived its usefulness given that no substantive consequences are attached to the distinction. It could be eliminated from the GATS framework.

B. Commitments Contained in the GATS at the Time of Signature of the WTO Agreement (1994)

The GATS, as concluded in 1994, already contained a number of commitments relating to telecommunications.

1. GATS Schedules

Fifty-six of the original GATS schedules included specific commitments on telecommunications on behalf of 67 WTO Members, among which were the U.S., as well as the EU and its Member States (twelve at the time submitting a single schedule). Forty-four of these schedules (accounting for 55 Members) were limited to value-added or enhanced telecommunications services, including the schedules of the most important countries in the international telecommunications market. The major countries in the international telecommunications market did not make any notable limitations to their commitments on value-added services.

2. The Annex on Telecommunications

An Annex on Telecommunications ("AT"), attached to the GATS, concerns "access to and use of public telecommunications transport networks and services". The AT is based on the recognition that telecommunications are an essential tool for other economic activities, such

as banking. It therefore set forth certain principles to make sure that concessions on other services would not be frustrated by a lack of progress on telecommunications negotiations. In other words, the AT can be seen as a general insurance policy for suppliers of other services that they would have access to the requisite telecommunications networks and services in WTO countries.

The AT does not contain or lead to any market access or national treatment obligation. It is not to be interpreted to require WTO Members to allow the provision of telecommunications services beyond the commitments they have already made in their respective schedules. The AT is only applied once a WTO Member has offered specific commitments in a given service sector. It is therefore comparable to the general GATS obligations which apply in addition to the specific commitments made in schedules.

The central provision of the AT binds each Member to "ensure that any service supplier of any other Member is accorded access and use of public telecommunications transport networks and services on reasonable and non discriminatory terms and conditions". This obligation is further specified as follows:

- Access to and use of leased lines is guaranteed, with the right to attach equipment to the network, to connect leased lines to the public network or the leased lines of a third party, and to choose the protocol to be used in the supply of a given service.
- Public networks and services must be available for the transport of information
- Restrictions on access and use must be necessary to ensure public availability of the network or service, network or service integrity or the enforcement of the commitments made in the GATS schedule.
- The AT imposes some obligations regarding the transparency of tariffs and other terms and conditions relating to public telecommunications transport networks and services. It is also of interest to note that developing countries can claim an exception to the AT in order to strengthen their domestic telecommunications infrastructure or their participation in international negotiations on telecommunications.

To ascertain whether a service supplier from "WTO Member B" can rely on the AT in "WTO Member A", regard must be had to the GATS schedule of Member A. The AT is attached as a "bonus" to specific commitments in a given sector. For an insurance provider from Member B, therefore, the mere fact that Member A has given a commitment in the insurance sector entitles that provider to the benefits of the AT, irrespective of the commitments of Member A in the telecommunications sector.

For instance, when Member A enters into specific commitments in the insurance sector while not making any specific commitments on telecommunications services, the AT generally gives insurers from Member B the right to access and use whatever public telecommunications transport networks and services are offered in Member A. In the rare case where the TO of Member A chooses not to offer leased lines, the insurer from Member B would not obtain much (more or less only the right to access and use the public telecommunications network). In most countries, however, leased lines will

be offered by the TO. The insurer from Member B could then rely on the AT to obtain leased lines on non-discriminatory terms and to connect them to the public network in Member A.

In most cases, the AT will enable foreign suppliers of services for which a WTO Member has undertaken specific commitments to use their own telecommunications equipment, in combination with those leased lines, in order to self-provide their telecommunications needs. Indeed, WTO Members are bound to allow the basic operations required to put together a private telecommunications network and to permit cross-border information movements for "intra-corporate communications" purposes. The definition of "intra-corporate communications" is fairly narrow expressly excluding any services offered to unrelated companies or customers. There are some gaps in the coverage of the AT, which made it unsuitable as a regulatory basis for the liberalization of "basic" telecommunications.

The Reference Paper used in the NGBT and GBT contains heavier commitments as regards "major suppliers", notably on interconnection (points of interconnection, timeliness, cost-oriented rates, unbundling); at the same time, the AT's scope is not limited to "major suppliers" and its obligations are also couched in more general terms ("access to and use of" networks and services).

C. Commitments in the Fourth Protocol

The NGBT and GBT negotiations were aimed at specific commitments in the field of basic telecommunications. The Annex depicts a "model schedule" after the entry into force of the Fourth Protocol.

1. Market Access and National Treatment Commitments

Fifty-five schedules of specific commitments were attached to the Fourth Protocol, accounting for 69 countries, with the EC and its Member States presenting a single schedule. From these 55 schedules:

- Forty-seven schedules (for 61 countries) contained commitments to liberalize at least partially the provision of voice telephony. Two countries only committed to liberalize voice services to closed user groups. International voice services were liberalized in 42 schedules (56 countries), national long-distance services in 37 schedules (41 countries), and local services in 41 schedules (55 countries). A large number of commitments (for 25 countries), were phased in after the entry into force of the Fourth Protocol: for instance, Spain (December 1998), Ireland, Portugal, Argentina and Singapore (2000), and Greece (2003);
- Forty-nine schedules (63 countries) included commitments on data transmission services, 41 schedules (55 countries) on leased lines, 46 schedules (60 countries) on cellular/mobile telephony services, 45 schedules (59 countries) on other types of mobile services (mobile data, paging), 37 schedules (51 countries) on mobile satellite services or transport capacity and 36 schedules (50 countries) on fixed satellite services or transport capacity.

OECD Members, with the exception of Switzerland and Turkey, liberalized all of the services mentioned above.

One of the key objectives of the United States in this round of discussions was to obtain commitments from WTO Members on foreign investment in local telecommunications services providers. Of the 55 schedules annexed to the Fourth Protocol, 42 (covering 56 countries) contained a commitment to permit foreign ownership or control of all telecommunications services and facilities. According to the U.S. Trade Representative, these 56 countries account for 97 percent of the total basic telecommunications services revenue of WTO Members.

Nonetheless, certain significant WTO Members retained a foreign investment limit, notably India, South Africa, Turkey and many of the "Asian tigers" (Indonesia, Malaysia, the Philippines and Thailand). Others left foreign investment limits on certain services, including important players such as Brazil, Canada, France, Israel, Mexico and Portugal. Moreover, certain countries retained limits on foreign participation in the local incumbent TO, including Australia, Japan and New Zealand.

A number of issues arose with respect to the scheduling of commitments. First, there was discussion on whether to differentiate according to whether competition would take place only at the services level (or resale) or also at the infrastructure level ("facilities-based competition"). The key issue is whether, and if so how much, control should be retained over the construction of infrastructure. Many countries—especially developed ones—have a well-established telecommunications infrastructure. Since it is not necessary to construct a parallel infrastructure everywhere, competition could have been limited to resale only (although creating resale opportunities always require extensive regulation). On the other hand, certain countries—mostly developing ones—wanted to promote the expansion of their telecommunications infrastructure and were only inclined to allow facilities-based competition. Ultimately, it was agreed in the GBT that market access commitments would extend both to facilities-based and resale competition.

Second, many countries participating in the telecommunications negotiations conditioned their market access offers on the availability of frequencies. This could be seen as a factual statement reflecting the scarcity of a natural resource, or a broad reservation that allowed national or political preferences and thereby undermined market access commitments. To avoid any misunderstanding, it was indicated that frequency availability ought not to be mentioned in the market access commitments, since it is covered by the general GATS framework for domestic regulation.

Finally, the privatization of State-owned enterprises is a matter that falls outside the purview of the GATS. Accordingly, neither the GATS nor the Fourth Protocol contained any provision on the privatization of State-owned TOs. Hence, even if many States made commitments to open their markets to foreign investment, a local TO may remain beyond the reach of a foreign investor as long as the State does not decide to privatize it. A State

remains free not to privatize a State-owned local TO fully, so in practice foreign participation in the local TO can be limited.

Since the conclusion of the Fourth Protocol and up to July 2006, six signatories (Guatemala, Honduras, Morocco, Pakistan, Switzerland and Venezuela) have improved their commitments. Furthermore, seventeen new WTO members (Albania, Armenia, Cambodia, China, Croatia, Estonia, Georgia, Jordan, the Kyrgyz Republic, Latvia, Lithuania, Macedonia, Moldova, Nepal, Oman, Saudi Arabia and Taiwan) have made commitments on basic telecommunications in the course of their initial schedule of specific commitments.

2. Additional Commitments on Regulatory Principles: The Reference Paper

The most remarkable feature of the Fourth Protocol is undoubtedly that almost all participating countries (but for Ecuador and Tunisia) agreed to enter into additional commitments concerning regulatory principles to be applied in the telecommunications sector. These principles are derived from a brief Reference Paper ("RP"), which was prepared by a group of countries in the run-up to the April 1996 deadline. Some countries (Bolivia, India, Malaysia, Morocco, Pakistan, the Philippines, Turkey and Venezuela) did not adopt the whole of the Reference Paper, while others (Bangladesh, Brazil, Mauritius and Thailand) have agreed to follow it at a later point in time.

The purpose of the RP is twofold: to provide the requisite safeguards in domestic law for market access and foreign investment commitments to be truly effective, and to anchor these safeguards in the WTO system and hence make failure to implement them challengeable under the WTO Dispute Settlement Understanding.

As noted in the introduction, until recently the telecommunications sector in most countries operated under a legal monopoly regime whereby one or a few operators held the exclusive right to provide telecommunications services. Whenever liberalization occurs, the former monopoly operator is by definition almost always the dominant player on the market. It is in many ways advantaged, if only because its network is already in place and it has a strong customer base. Usually, it also wields more political clout than any entrant, although this often means that it will be burdened with certain obligations that it would not otherwise have incurred based on free market principles (whether they are called universal service obligations or otherwise). The RP contains a core of principles designed to ensure that the advantages of the former monopoly operator are not used to the detriment of new entrants on the telecommunications markets.

The RP has been interpreted for the first time in the *Telmex* Report, issued in April 2004. The US alleged that Mexican international telecommunications policy infringed WTO law in three respects:

i. Mexico failed to ensure that the tariffs of Telmex, the incumbent opera tor, for terminating international communications in Mexico were cost oriented, thereby breaching its commitment under the RP to ensure "cost-oriented rates" for interconnection;

- ii. Mexico forced Telmex to negotiate such termination tariffs for all other operators and imposed a "proportionate return" system on incoming traffic, thereby failing to prevent anti-competitive practices, in contravention of the RP; and
- iii. Mexico failed to ensure access and use of its public networks and services on reasonable and non-discriminatory terms and conditions, contrary to the AT.

The analysis below will refer to salient findings in this report.

a. Legal nature

The RP could be characterized as a policy document, a common framework during the negotiations leading up to the 1997 agreement guiding the parties' individual commitments. As such, parties were free to deviate from the RP, to select particular issues from it and to rephrase certain obligations in their individual Schedules. While most WTO Members participating in the Telecommunications Agreement ultimately agreed to follow the RP, a number of them did make slight or more important modifications when formulating their additional commitments. Accordingly, the starting point of a legal analysis of a WTO Member's additional commitments is the language each country has used when incorporating the RP in its own GATS Schedule. For ease of reference, and given that many WTO Member States did incorporate the RP more or less verbatim in their schedules of commitments, the following analysis discusses the RP rather than individual country schedules.

b. Scope

As indicated in the heading "Scope", the RP applies to basic telecommunications services. This is probably a consequence of the mandate of the NGBT and GBT. As already noted, the distinction between basic and enhanced or value-added services does not serve much purpose in the GATS context. On its face, the RP could apply just as well to all telecommunications services, however characterized. It makes almost no practical difference that the *obligations arising* under the RP are only imposed on suppliers of basic services, since the markets for value-added or enhanced services are usually competitive. On the other hand, there is no reason why providers of all types of telecommunications services should not benefit from the *rights* that will be granted to suppliers when WTO Members implement the RP.

The RP is divided into six headings. The fi rst two (competitive safeguards and interconnection) apply to the regulation of "major suppliers", while the last four (universal service, licensing, independence of the regulator and allocation of resources) deal with general regulatory issues.

c. The regulation of "major suppliers"

The first two headings of the RP concern "major suppliers" of telecommunications services within a given country. The RP defines a "major supplier" as one: (i) with a power "materially [to] affect the terms of participation (having regard to price and supply)"; (ii) flowing from one of two alternative situations, namely control over essential facilities or the

position on the market; and (iii) in the relevant market for basic telecommunications services. Each of these elements is examined in turn.

- i. The precise nature of the power to affect the terms of participation in the market is not clear. On its face, it would appear to mean quite a radical influence on the market, namely the power to exclude or control the participation of market actors. The RP is therefore concerned with suppliers that have a particularly strong position on the market. This may or may not correspond with the definition of dominance or monopoly power in the domestic competition laws of individual signatories of the RP.
- ii. In order for a supplier to qualify as a major supplier, the power mentioned above must come from control over essential facilities *or* a position on the market. The introduction of "essential facilities" as an alternative criterion is noteworthy. Elsewhere, the so-called "doctrine of essential facilities" has generally been presented as a special case of a dominant or monopoly position, an approach that is not without its share of problems. In this respect, the RP acknowledges that control over facilities must be seen as a problem analytically separate from that of large market positions (since they can be evidenced by a high share of a relevant market).

The RP defines essential facilities as the parts of a public telecommunications transport network or service (a) that are exclusively or predominantly provided by one or a few suppliers, *and* (b) for which there is no economically or technically feasible substitute. Condition (a) is worded somewhat loosely in that a facility could be deemed essential even if it were provided on a competitive basis by a few suppliers. Condition (b) seems to echo the widespread view that an especially high level of non-substitutability must be shown to establish that a facility is essential. Nevertheless, it is open to question whether the "essential facilities doctrine" as formulated in the RP, has the same meaning as in competition law.

Indeed, while under a normal competition law approach the burden of proving "essentiality" is quite high, the RP is part of the GATS commitments, which are meant to enable market access. It could be that a lower threshold (*i.e.*, a facility economically and technically necessary for a newcomer from another country to access the market) would suffice to conclude that a firm controls an essential facility for the purposes of the RP.

iii. The use of "relevant market" must be taken as a reference to competition law where this concept is well known. The wording of the RP does not require that the major supplier itself be active on the relevant market; it can very well exert the power in question from an upstream, downstream or neighbouring market. It may seem in theory that a major supplier would have no incentive to use such a disciplinary power were it not itself active on the relevant market or intent on being so, and that accordingly there should be no competition or regulatory concern if the major supplier is not active on the relevant market. In practice, given the difficulties that have surrounded market definition in the telecommunications sector, at least in Europe, it is more convenient not to burden

the inquiry further by requiring that the major supplier also be present on the relevant market.

While the definition of a "major supplier" in the RP is framed in relatively indeterminate terms, the WTO panel in the *Telmex*-case had no trouble finding that the incumbent telecoms company Telmex was a "major supplier".

d. Competitive safeguards

As a general principle, the RP contains a commitment to enact appropriate measures to prevent anti-competitive practices by major suppliers. In the specific case of service providers holding a monopoly or exclusive/special rights, the obligations of the RP complement those of the GATS. To the extent that anti-competitive practices are not defined but for the specific examples given in the RP, it would appear that WTO Members could meet their commitment to enact appropriate measures either through the application of general competition law, or in the absence thereof, through a specific regulatory provision for the telecommunications sector whereby a set of defined practices is forbidden.

The RP lists three examples of anti-competitive practices: (i) cross-subsidization, (ii) use of information obtained from competitors, and (iii) withholding technical and commercial information.

a. Cross-subsidization is not defined, but for the qualification "anti-competitive". Generally, cross-subsidization consists in the use of profits derived from one area of operations in order to finance another (presumably loss-making) area. It is a common business practice. It can become anti competitive when the operations in the profit-making area are conducted pursuant to exclusive or special rights or when the major supplier in question holds a dominant position in the profit-making area. As experience in the EU shows, it can be quite difficult to translate a complaint about unfair or "cross-subsidized" prices into violations of general competition law. If cross-subsidization is to be prevented, an appropriate regulatory framework must be developed. In order to be able to monitor whether any cross-subsidization occurs, one of the first regulatory elements required is that the major supplier in question implement an appropriate accounting system, with regular reporting and disclosure requirements. Given the size and service portfolios of large telecommunications companies, it is otherwise almost impossible to prove that cross-subsidization has occurred.

Furthermore, some cost-allocation key must be found, a very thorny issue as mentioned below in relation to interconnection. The RP is silent on these regulatory issues, which leads one to doubt the effectiveness of the general commitment to prevent cross-subsidization.

(ii) TOs typically operate at many levels in the telecommunications sector. They will, for instance, both supply leased lines to data communications providers in order to enable them to complete their network, and at the same time offer data communications in competition with those providers.

In such a case, in the course of supplying leased lines to its competitor, a TO is likely to obtain information from the competitor which is often precise enough to identify the customers of the competitor or to guess the intentions of a competitor. If that information is relayed to the retail division of the TO, it can be used for anti-competitive purposes (although the RP does not specify what "anti-competitive purposes" means). Here as well, structural measures, such as the legal separation of business divisions operating in different markets may be necessary, although the RP does not mention this point.

(iii) Since the RP defi nes anti-competitive practices in absolute terms (by giving examples) and not in terms of non-discrimination, it would appear from the text of the RP that a major supplier could be forced to disclose technical and commercial information to third parties that want to provide a certain service, even if neither the major supplier nor any other party is already providing that service. Such far-reaching consequences, if they were intended, can only be explained by the high degree of market power of the "major suppliers" within the meaning of the RP.

While appreciating the many questions raised by the competitive safeguards included in the RP, one should not underestimate the capacity of WTO panels and the Appellate Body to provide answers. For instance, in the Telmex Report, the WTO panel found that the three practices listed in the RP are merely examples, and that the term "anti-competitive practices" also includes other practices, in particular horizontal practices related to price-fixing and market-sharing agreements. The panel reached this conclusion in the light of the ordinary meaning of the term anti-competitive practices as found in dictionaries, the use of this term in the competition legislation of WTO Members, related provisions of international instruments concerning competition policy, as well as the object and purpose of the RP.

We submit that the panel conclusions are persuasive. Price-fixing and market-sharing arrangements are considered hard-core violations of competition laws around the world; leaving them outside of the scope of "anti-competitive practices" would have curtailed the RP's impact considerably. It would have transformed the RP's examples of anticompetitive practices into three isolated instances.

The panel found that the two elements of Mexican telecommunications policy at issue did constitute anti-competitive practices. The requirement that Telmex negotiate termination rates for international traffic on behalf of all its competitors on that market amounted to price-fixing, while the "proportionate return" policy amounted to market-sharing.

The panel then endorsed the US complaint that Mexico maintained measures that require Mexican telecommunications operators to participate in these anti-competitive practices. In so doing, the panel adroitly countered a clever Mexican appeal to the so-called "sovereign compulsion defense" in many competition laws. Pursuant to this defense, a firm can defend itself by showing that its allegedly anti-competitive conduct was in fact mandated by legislation. Mexico argued that since its laws required Telmex and its competitors to engage in otherwise anti-competitive practices, these practices fell outside the scope of the RP. The panel answered that the GATS obligations, including the RP, were designed to limit

the regulatory powers of the WTO Members. A WTO Member cannot hide behind its domestic law in order to erode unilaterally its international commitment to prevent major suppliers from continuing anticompetitive practices.

However sensible and convincing, the panel's reasoning is geared to fi t an unusual set of facts. One might recall at the outset that the RP provisions at stake are concerned with "major suppliers"; in competition law terms, their scope extends to "dominance" issues. The anti-competitive practices in question (price-fixing and market-sharing), however, pertain more to the "cartel" or "collusion" side of competition law. As regards dominance, the pricing of a dominant firm should become an issue only if it is excessive or predatory; similarly, any measures designed to enforce a certain market share should be problematic only if exclusionary. Yet the panel did not find that the high level of Telmex's termination rates as such constituted an anti-competitive practice from a dominant firm (or "major supplier"). Elsewhere in the report, the panel faulted the high rates on the basis of a regulatory concept specific to the RP, holding that these rates were not "costoriented". But in finding that Telmex had engaged in "anti-competitive practices", the panel focused on the collusive or cartel-like nature of Telmex behaviour, i.e., price-fixing and market-sharing, which was required by Mexican legislation. The panel recognized that the Mexican measures are "exceptional" and cannot justify a "sovereign compulsion defence". Indeed the panel's findings do not reveal much about how a future WTO panel might deal with rather more typical "dominance" issues involving "major suppliers". Furthermore, whether State regulation making a certain tariff compulsory—as opposed to explicitly ordering one firm to fi x prices for the whole market—would also fall foul of the RP is still debatable.

e. Interconnection

The provisions on interconnection constitute another key part of the RP. In large part, they also seek to prevent anti-competitive behaviour by a major supplier, and they are accordingly closely linked to the provisions discussed above. Interconnection is defined as the "linking with suppliers providing public telecommunications transport networks or services in order to allow the users of one supplier to communicate with users of another supplier and to access services provided by another supplier".

This definition closely resembles the standard U.S. and EC definitions. In the United States, interconnection is defined as the "physical linking of two networks for the mutual exchange of traffic", while in the EC, it is the "physical and logical linking of public communications networks used by the same or a different undertaking in order to allow the users of one undertaking to communicate with users of the same of another undertaking, or to access services provided by another undertaking". In contrast to customer access, interconnection is granted between telecommunication service providers. It occurs not at network termination points, but rather at more central points of the network, and it offers a quite different and more extensive range of possibilities (such as calls between users of both networks).

In the *Telmex* Report, the panel elaborated at some length on the meaning of interconnection in the RP, as Mexico had argued that this term did not cover the cross-border supply of telecommunications services. The panel rejected this argument and found that international interconnection was included in the substantive scope of the RP.

The RP enumerates the parameters of the obligation to ensure interconnection, namely:

- Interconnection must be made at any technically feasible point.
- The terms, conditions and rates must be "non-discriminatory", and the quality of interconnection, "no less favorable" than that provided to subsidiaries, affiliates or third parties.
- Interconnection must be provided in a timely fashion.
- The rates must be cost-oriented (and not necessarily cost-based).

Both at the national and international level, cost-orientation has proven to be a most difficult issue. While as a principle it looks very reasonable on paper, its application is rife with practical difficulties. Since telecommunications firms are typically multi-service firms with a high level of common costs, cost allocation plays a central role. There is a wide choice of theoretically acceptable formulae, including fully-distributed costs ("FDC"), longrun incremental costs (historic or forward-looking, the famous "FL-LRIC" standard) or stand-alone costs ("SAC"). In the case of interconnection between fixed networks, FL-LRIC has tended to prevail in national laws, but even so at a practical level its implementation is rarely ever uncontroversial. The RP does not indicate anything beyond the general costorientation principle. In Telmex, the panel found, on the basis of a survey of ITU Recommendations and domestic laws and regulations, that "cost-oriented" under the RP should be assessed on a long-run incremental cost (LRIC) basis, allowing for a reasonable rate of return. Since Mexico did not provide any cost data on Telmex itself, the panel relied on the four different methods put forward by the United States to show that Telmex could not be charging cost-oriented rates, and found that Mexico was in breach of its commitments under the RP.

- The terms, conditions and rates must be transparent and reasonable, having regard to economic feasibility;
- There must be "sufficient" unbundling, so that there is no need to "pay for network components or facilities" that are not required. Similar provisions are found in the U.S. Telecommunications Act of 1996 and EC Directive 2002/19. Such provisions are difficult to apply unless the regulatory authority intervenes to provide a classification of network components in order to make the obligation more concrete. The RP does not contain any provisions on this subject. A related question is whether the provisions of the RP imply an obligation to unbundle the local loop. If the experience of the EC can be taken as a guide, access to an unbundled local loop does not truly qualify as interconnection (given that the local loop does not as such constitute a network, but rather a single component thereof). A more specific legal instrument is needed to cover such a case.

• Interconnection must also be provided upon request at points other than those provided to the majority of users, subject to charges for additional facilities.

Unless otherwise noted above, the parameters contained in the RP broadly follow the regulatory framework in place in the United States and the EC, although the RP does not contain much detail.

The RP contains provisions on transparency. Even though the RP imposes a general duty of non-discrimination and the public availability of inter connection agreements or standard offers, some negotiation would still be needed for newcomers to obtain interconnection agreements (with prolonged discussions as to what terms and conditions are non-discriminatory). The RP does not go as far as the U.S. Telecommunications Act of 1996, which forces local exchange carriers to offer to other telecommunications carriers the same terms and conditions as those offered under existing interconnection agreements. The RP also requires the creation of dispute settlement mechanisms in case of disagreement with a major supplier on the terms, conditions and rates for interconnection.

f. Universal service

The RP does not provide any definition or parameters for universal ser vice, expressly leaving this question to each WTO Member. Parties to the Fourth Protocol do, however, agree that their rules on universal service will be transparent, non-discriminatory, competitively neutral and not unduly burdensome.

The application of universal service schemes has also given rise to some friction at the international level. In the EC, Member States must include a specific set of services in the universal service obligations that they impose on one or more service providers. Member States may then set up a cost recovery mechanism for the extra costs associated with universal service, in the form of an industry fund. These costs are to be recovered from the other providers of public networks and services in the country in question (therefore excluding international operators merely delivering traffic for termination). The U.S. approach to universal service, in contrast, provides for a larger class of services that can be funded via a universal service mechanism. Moreover, that mechanism consists of a supplementary charge on access to local net

works. This charge is due irrespective of where the other end of the call is, *i.e.*, international operators must also pay it when they access local networks to terminate international calls. In other words, foreign telecommunications operators (and their customers) are contributing to universal service in the United States. The EC has voiced its dissatisfaction with this aspect of U.S. telecommunications law.

g. Licensing

The RP contains commitments on the public availability of licensing criteria, time periods required to decide on a license application and terms and conditions of individual licenses. Reasons are to be given when licenses are denied. The provisions in the RP concerning licensing are limited, and some major issues are not addressed:

- The RP does not attempt to define the situations in which a license can be required, nor does it outline the terms and conditions that should or should not be found in a license. Licensing can become a substantial barrier to cross-border trade, since a service provider can be subject to fairly different (and sometimes incompatible) licensing conditions from one country to the other, even if each country applies an even-handed licensing process. Moreover, when the scope of activities for which a license is required is defined broadly and the time period for issue of a license is relatively long, new market entrants are penalized by having to wait while the incumbent catches up. The RP does not address these issues. The GATS general rule proportionality could, however, perhaps disproportionate licensing requirements in check. Conceivably, the provisions of the AT dealing with permissible conditions on access and use, though not dealing with licensing conditions, could be used to supplement the proportionality principle in this respect.
- There is no provision for the mutual recognition of licenses in the RP. The GATS merely encourages the mutual recognition of licenses, while it does contain a non-discrimination obligation. In the telecommunications sector in particular, it is very important to be able to operate globally, *i.e.*, at both the international and domestic levels. A regional operator wanting to serve the Mercosur area, for instance, would likely have to obtain licenses from each and every country. It is however understandable that the RP does not touch upon this issue, since even within the EU, agreement on the mutual recognition of telecommunications licenses has proven elusive. At the same time, the EC has now put in place a mutual recognition regime for electronic commerce services, which shows that mistrust amongst countries in this area is not insurmountable.
- The RP only contains an obligation to provide reasons when a license is denied, but not in cases when a license is granted with conditions that the applicant may not desire.

h. *Independence of the regulatory authority*

Pursuant to the RP, signatories to the Fourth Protocol are bound to guarantee the separation of the regulatory authority from any supplier of basic telecommunications services, as well as the regulatory authority's impartiality. There is however no provision in the RP analogous to the requirement in EC law that, when the TO is state-owned or state-controlled, the regulatory authority should also be structurally separated from the government department that exercises ownership and control functions over the TO. Indeed, when the local TO is State-owned but autonomous, two sometimes distinct sets of interests may conflict with the regulatory authority: the interests of the TO itself as a business, and the interests of the government as the owner of the TO. Even if the regulatory authority is independent from the TO as a business, it can still conflict with the interests of the government as owner, for instance when privatization is taking place.

The RP is silent on some important issues as well, such as the circumstances in which recourse to an independent authority must exist (except in the case of interconnection disputes), or the standing requirements for foreign entities before the independent authority.

i. Allocation and use of scarce resources

The RP includes commitments to allocate and use frequencies, numbers, rights of way and other scarce resources in an objective, timely, transparent and non-discriminatory manner, with a reservation for national security interests applicable to the secrecy of certain frequency allocations.

j. Overall assessment

Some observers believe that the most important achievement of the Fourth Protocol lies in the RP. While we believe that the immediate impact of the RP should not be overstated, this document does provide a breakthrough at the international level. The RP reflects recognition that monopolized sectors cannot be liberalized with the stroke of a pen. Additional commitments are needed, in terms of both regulatory supervision as well as competition law principles. It is admirable that the negotiators of the RP recognized this point. One also has to appreciate how difficult it was for the negotiators to achieve something meaningful in this regard, as they were forced to explore areas that had long been politically fenced off.

As already noted, some of the RP's commitments concern licensing and other rules addressed to WTO governments, concerning for instance the way they allocate scarce resources like frequencies and telephone numbers. Since they are addressed to governments, these are commitments one would expect in a typical WTO Agreement. The RP also contains rules that effectively impose obligations on certain private entities, notably to open some of their production facilities (their public networks) to competitors from abroad. Reference is made to the so-called interconnection obligations. Moreover, WTO governments are supposed to take "appropriate measures" to prevent powerful suppliers of telecommunications services from engaging in "anti-competitive practices." The RP also gives examples of such practices.

It is highly unusual to find rules in the WTO that seek to govern private activities. Indeed, the rules of the RP stand in marked contrast to the few provisions scattered throughout the WTO agreements where competition law is mentioned. Some of these provisions give WTO governments the authority to intervene if they believe that private entities are engaged in competition law violations. Other provisions, notably in the GATS agreement, envisage that Members will consult each other about anti-competitive practices. However, none of these provisions forces governments to intervene or take action against private anti-competitive behavior. The governments have discretion to do so. In contrast, the Reference Paper does envisage obligations for governments to prevent anti-competitive practices, which would in turn impose obligations for private parties (*i.e.*, the major suppliers of telecommunications services) as well. This is a significant innovation in the WTO package of agreements.

Indeed, the competition law principles found in the RP are the first competition laws ever introduced in the WTO. This is the undoing of an old taboo. In the early 1950s, competition law was one of the factors that sank the genuine predecessor of the WTO, the International Trade Organization ("ITO"). It was the intention of the negotiators that the ITO would succeed the GATT and become the third international economic organization beside the IMF and the World Bank in the post-war UN-system. However, the Havana Charter was never even presented to the U.S. Congress for ratification because of the strong opposition there.

The chapter on competition law in the ITO-Treaty was one of the major stumbling blocks, since—however modest—this chapter went too far for American business. In November 2001, at the Ministerial Meeting in Doha, a decision was taken in principle to start negotiations on some form of competition law agreement in the WTO after the next ministerial meeting in Cancun. However, the Cancun Ministerial Meeting ended in failure. The EU agreed to drop competition law from the relaunched negotiations in the summer of 2004. Nevertheless, at some point the Reference Paper, and its interpretations in WTO dispute settlement, may help to break the ice by opening this controversial subject to multilateral negotiations.

Meanwhile, there is a need for much clarification. Many of the RP principles are formulated vaguely and/or are incomplete. There is no definition of basic terms such as "anti-competitive cross-subsidization", "anti-competitive results" and "non-discrimination". Nor is there a benchmark against which these terms are to be interpreted: is the goal to increase market access for foreign suppliers, or to improve effective conditions of competition in the host country? This can make quite a difference. WTO panels already have had occasion to distinguish between competition and trade law approaches.

It is also notable that the RP, while stipulating that an independent agency is supposed to hear private complaints about interconnection, remains silent on whether this agency should also be competent to hear private complaints about anticompetitive practices of the "major suppliers" of telecommunications services. While government-to-government complaints always remain a possibility in this area of WTO law, experience shows that private enforcement of competition law principles is indispensable to their effectiveness. Key regulatory concepts have also not been well developed in the RP.

In general, the RP avoids the "heavier" regulatory issues that are no less essential to ensure a level playing field: transformation of TOs into private law companies (including privatization), accounting standards for TOs, the definition of the network and service components to be unbundled, universal service, services for which individual licenses may be required or not, terms and conditions attached to licenses or the recognition of foreign licenses.

The fact that the commitments in the Reference Paper are open-ended and allow many different interpretations has been hailed as the "real value" of the RP, on the theory that no WTO Member could claim that only one interpretation is the valid one. Ultimately, it would

be up to WTO panels and the Appellate Body to decide the specific interpretations of those commitments. We could not disagree more. If the commitments undertaken on the basis of the Reference Paper are supposed to be legally binding, then they must be intelligible to all interested parties, their interpretation must be predictable, and their enforcement should not be seen either to "add to or diminish" the rights and obligations of WTO Members. In the words of the *Telmex* panel:

WTO negotiators sometimes praise the political wisdom of resorting to "constructive ambiguity" as a diplomatic means of enabling consensus on WTO rules. The limited legal task of dispute settlement findings is very different. It is to decide on the legal claims, in a particular dispute, based on the "ordinary meaning" of the WTO provisions concerned in their context and in light of the "object and purpose" of the agreement.

In other words, the primary responsibility to clarify and improve the RP rests with the WTO membership, at the negotiating table. The same is true for the elaboration of competition law principles. If the WTO membership fails to assume this responsibility, dispute settlement on the basis of the RP remains a second-best solution to make the necessary progress. The overall admirable work of the panel in the *Telmex* Report has given a boost to the credibility of the RP. This report has also underlined the useful role that competition law principles can play in opening markets that were hitherto closed.

3. Residual Importance of the Annex on Telecommunications after the Fourth Protocol

As a result of the successful conclusion of the GBT negotiations (especially the agreement on the RP), the AT has lost much of its significance. Yet the more salient obligations under the RP are in some respects more limited than those of the AT, as noted in the *Telmex* Report, where the panel made concurrent findings under both the AT and the RP. The AT therefore remains relevant:

- When a given WTO Member has not made any commitments under the Fourth Protocol;
- When a given WTO Member has made commitments under the Fourth Protocol but has not or not fully committed to the principles contained in the RP. In this case, the AT could provide some protection to suppliers of basic telecommunications services;
- When a WTO Member has made commitments under the Fourth Protocol, including the RP in full, for issues falling outside of the scope of the RP, because no "major supplier" is involved or because the problems do not concern "interconnection" but another form of "access to and use of" public networks and services;
- When a WTO Member has given commitments in a service sector other than telecommunications, for foreign service suppliers in that sector in their dealings with the incumbent TO: and
- When a WTO Member has given commitments on value-added telecommunications services, for suppliers of these services, since as mentioned above, the RP only applies to basic telecommunications services.

The latter two points could prove particularly interesting, in the converged environment in which the sector is heading, for providers of content distributed over telecommunications networks.

III. The General GATS Obligations that Apply to the Telecommunications Sector

With the Fourth Protocol, the GATS now contains a complete set of specific commitments on telecommunications. In addition, as mentioned above, certain general obligations of the GATS come into play only when specific commitments are made for a given sector, relating essentially to domestic regulation. The application of these general obligations to the telecommunications sector, in light of specific commitments, is reviewed below. For the sake of convenience, the MFN obligation, which can apply independently of any specific commitment, is also reviewed.

A. The Most-Favored-Nation ("MFN") Obligation

In general, the MFN obligation applies to every measure concerning trade in services, and it would accordingly apply to measures concerning telecommunications services as well. Essentially, it binds WTO Members to treat services and service suppliers from other WTO Members no less favorably than like services and service suppliers from any other country. However, the GATS Annex on Negotiations on Basic Telecommunications provided that the MFN obligation would only enter into force for basic telecommunications after the market access negotiations were completed or appeared to remain unsuccessful. With the Fourth Protocol, the MFN obligation now applies to basic telecommunications as well.

WTO Members are allowed to apply measures in derogation of the MFN obligation, provided that they were identified during the negotiations and listed in an annex to the GATS. These derogations are then subject to periodical review and must in principle be terminated at the latest ten years after the entry into force of the WTO Agreement, *i.e.*, on January 1, 2005. The Annex on Negotiations on Basic Telecommunications has similarly extended the deadline for so-called "Article II Exemptions" on basic telecommunications until the conclusion of the negotiations. Indeed, Article II Exemptions were also negotiated within the NGBT and GBT at the same time as specific commitments. Nine countries submitted Article II Exemptions (mentioned below when relevant).

The effects of the MFN obligation were felt mostly in countries where telecommunications are operated by the State or by a legal monopoly. It must indeed be emphasized that the MFN obligation, like virtually all WTO obligations, rests only on States and their agencies. For instance, to the extent a government still negotiates accounting rates to settle international telephone calls, a sending country would be entitled to claim the most favorable rate a terminating country has offered to any other country—regardless of whether that other country is a WTO Member. Accordingly, five countries (Bangladesh, India, Pakistan, Sri Lanka and Turkey) submitted MFN exemptions for differential accounting rates concluded in separate bilateral agreements with other countries.

To the extent private or privatized TOs handle international relations (including the negotiation of accounting rates), they are not directly bound to observe the MFN obligation. Two exceptions may exist. First, since most TOs will qualify as major suppliers for the purposes of the RP, the commitments on anti-competitive practices may well apply to differential treatment in international relations (*e.g.*, discriminatory accounting rates). Domestic law restrictions on discrimination then become relevant, to the extent they do not already apply independently of the RP commitments. Second, if a TO enjoys legal monopoly rights or exclusive or special rights, a government may be forced to intervene under the GATS if the TO acts in a manner inconsistent with MFN by charging discriminatory prices on the basis of nationality (*e.g.*, differing accounting rates despite comparable distances or traffic volumes).

Once a complete set of specific commitments relating to telecommunications is in place, the general MFN obligation of the GATS also creates a so called free rider problem. Indeed, even if only 69 of the 130 WTO Members made specific commitments on telecommunications at the time of the Fourth Protocol, the benefit of these commitments must be extended to all WTO Members pursuant to the MFN obligation. Even among the 69 countries that participated in the NGBT and GBT, the commitments are by no means symmetrical. If Canada, for example, limited foreign ownership of facilities based service providers to 46.7 percent (direct and indirect), a country such as the Netherlands, which fully removed all restrictions must allow Canadian investors to buy a majority in a facilities-based telecommunications provider. These free rider effects explain why a critical mass of acceptable offers was considered to be so important. If the free rider effect was thought by a Member to be too substantial, an Article II Exemption could still be used, but only on a temporary basis. The United States, for one, "retaliated" against the perceived shortcoming of the Canadian commitment mentioned above by filing an Article II Exemption on foreign ownership of U.S.-based companies active in certain satellite services.

B. Domestic Regulation

While the GATS recognizes the right of WTO Members to regulate, it also imposes certain obligations relating to domestic regulation. For instance, for telecommunications services these obligations apply to licensing schemes, universal service obligations, frequency allocation, numbering, and access/interconnection regulations.

The GATS obligations regarding domestic regulation distinguish between "committed services" (*i.e.*, services for which specific commitments have been made) and other services. All measures affecting services generally must be published. Moreover, for committed services, any new law or regulation, or amendment of existing rules, which significantly affects the trade of services in that sector must be notified to the WTO, though prior consultation is not required. Furthermore, in committed sectors, the WTO Member concerned must administer all regulations of general application in a reasonable, objective and impartial manner.

Furthermore, WTO Members are also bound to institute review procedures before independent instances for administrative decisions affecting trade in services. A service supplier who fi les an application to operate in a WTO Member in a "committed sector" is entitled to a decision within a "reasonable period of time". At "any time" when so requested the WTO Member shall "without undue delay" inform the applicant of the status of his application. These general obligations correspond to or complete the specific commitments found in the RP.

Moreover, in the absence of anything on this point in the RP, the general obligations of the GATS are the only provisions applicable to the substance of the terms and conditions of telecommunications licenses, although some guidance can already be derived from the provisions of the AT dealing with conditions on access and use, where a core of permissible restrictions and requirements is outlined. In essence, licensing requirements should not restrict trade unnecessarily. Whenever a WTO Member has given commitments on telecommunications services, its licensing requirements are subject to a form of proportionality test (objective and transparent criteria, not more burdensome than necessary to ensure quality of service, not in themselves a restriction on supply). No WTO Member can undermine these commitments through the imposition of unnecessarily cumbersome licensing requirements, at least when such requirements would be new or unexpected.

The WTO Council for Trade in Services is supposed to elaborate disciplines to concretize these principles—whether they are subject to commitments or not. A reading of the GATS that would, for example, expressly tolerate the capricious, subjective and biased regulation of "uncommitted" telecommunications services would seem out of place.

Nevertheless, the negotiation of principles of good administration regarding services regulation is proving to be difficult. It is generally recognized that the present disciplines of Art. VI need to be clarified and sensibly strengthened. A key question has become how to determine in the WTO whether services regulations, such as telecommunications licensing requirements, are "necessary" or "proportionate". In reaching this determination the basic tension between market integration and national regulatory autonomy has to be resolved. This difficulty is not particular to the services sector. In the goods areas as well, assessing the proportionality of non-discriminatory domestic regulation has been one of the most intractable questions for the WTO membership.

C. Government Procurement

The scope of GATS is limited in an important respect. The general MFN principle, as well as specific commitments relating to market access and national treatment, do not apply to government procurement of services. Negotiations on this subject started in 1995, though no timetable was set for their completion. It is currently envisaged by the Members that the negotiations on government procurement will be completed at the same time as the overall negotiations on services liberalization which restarted in 2000.

For foreign suppliers of telecommunications services this gap can have considerable impact. Governments are probably the largest single customer for telecom services in any country.

The political expediency to purchase locally is supplemented by an economic interest, as long as governments retain an important stake or share in the local TO.

IMPLEMENTATION OF WTO COMMITMENTS

This section deals with how the two major trading blocs—the EU and the United States—implemented their WTO commitments in the telecommunications sector. It would be equally interesting to conduct such a study of the other WTO Members that have entered into commitments in the telecommunications sector, but it would make this contribution much too large. In any event, the extensive experience of the EU and the United States with respect to regulation and competition law should be indicative of the difficulties arising in other WTO Members.

I. The EU, its Member States and their WTO commitments

Before looking at how the EU and its Member States implemented their WTO commitments, it should be underlined that developments in the EU had a substantial influence on the content of the Fourth Protocol and indeed on the very fact that it was concluded. First of all, the Protocol was to enter into force on January 1, 1998, which is also the date on which the full liberalization of the EU telecommunications sector was set to take place under EC law.

This is no coincidence. As mentioned earlier, the United States always insisted on a "critical mass" of offers, and only when the offers coming from the EC and its Member States became satisfactory to the United States did it become possible to attain such a critical mass. Political agreement within the EC on the full liberalization of the telecommunications sector was only finalized at the very end of 1994, when work was being pursued under the NGBT. The EC offers in the NGBT then began to reflect that agreement. Since full liberalization in the EU was one of the most significant commitments made, it made sense to align the date of entry into force of the Fourth Protocol with the internal deadline for liberalization in the EU.

As for market access and national treatment, the EC schedule contains very few permanent limitations of any significance. Leaving aside limitations scheduled by Portugal and Greece, the most significant limitation on the EC schedule is the twenty percent limit on direct non-EC ownership of public telecommunications providers operating radio-based infrastructure in France. This limit is widely seen as an answer to a similar limitation found in the U.S. schedule.

It has been said that the Reference Paper was based in large part on the regulatory framework that was being discussed at the EC level in 1996–1997. Accordingly, the substance of the Reference Paper was already present in that regulatory framework, and there was no need to modify or complement it to bring it into line with the Reference Paper.

For the EC and its Member States, the key operation required to implement the specific WTO commitments on telecommunications consisted of extending the benefits of internal measures to providers from non-EC WTO Members. In line with the respective constitutional orders of the EC and its Member States, this was done through various

legislative enactments ratifying the Fourth Protocol, so that for all intents and purposes firms from other WTO Members were put on the same footing as EC fi rms. Accordingly, the implementation of the Fourth Protocol by the EC and its Member States did not give rise to any significant problems.

In this context, mention should be made of the tensions that arose between the EC and its main trading partners, first and foremost the United States, concerning Directive 95/46 of October 24, 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data. This Directive requires the Member States to put in place a regulatory framework to ensure the protection of personal data. In order to avoid circumvention through "data havens" outside the EC, Article 25 of the "Data Protection Directive" obliges Member States to ensure that transfers of personal data to a non-EC country only take place if that country offers an "adequate level of protection" for such data, as found by Commission decision.

To assure adequate protection, the situation in the country in question is examined, and if needed negotiations can be held to conclude an agreement with the EC on date protection. Conversely, if the Commission finds that a given non-EC country does not offer an adequate level of protection for personal data, Member States are required to block data transfers to that country. As could be expected, non-EC countries protested at what they saw as an attempt to "export" EC data protection norms. The United States, in particular, disagreed with the EC both on substance—the Data Protection Directive being too protective on a number of points, in their view—and on the regulatory vehicle—the United States preferring to leave data protection to self-regulatory mechanisms instead of legislation.

Nevertheless, the United States and the EC entered into discussions on the issue. As the deadline for implementation of the Data Protection Directive (October 24, 1998), loomed without any agreement, the United States indicated that they might take the matter to the WTO as a breach of the EC's commitments regarding market access and national treatment, among others in the telecommunications sector. The EC, on the other hand, thought that the Data Protection Directive fell under the ambit of Article XIV(c)(ii) GATS. The matter was ultimately resolved, without prejudice, by the creation of a "safe harbor" system in the United States, which the EC found satisfied its requirements.

More significant difficulties were in store for the EC and its Member States as they renewed their internal telecommunications regulations. Many of the Directives of the 1998 liberalization package provided that the Commission had to undertake a review of the EC regulatory framework before the end of 1999. This review led to EC legislation concerning what is now called "electronic communications". While the regulatory package adopted in 1996–1998 did not specifically refer to the GATS and the Fourth Protocol, the new regulatory framework contains explicit references to the EC's obligations. As discussed below, this does not necessarily mean that the EC's regulatory framework is entirely in line with the requirements set forth in the GATS and the Fourth Protocol. Furthermore, the inclusion of telecommunications, together with a significant part of broadcasting and other activities, under the overall concept of "electronic communications" might create difficulties

for the EC in the upcoming rounds of negotiations. This issue is discussed below in relation to convergence.

The new EC regulatory framework rests on a number of assumptions that are not necessarily consistent with the thrust of the Reference Paper. The new framework is very much oriented towards competition law in at least two major respects. First, it is widely assumed that in the long-run sector-specific regulation will shrink to leave economic regulation mostly to competition law. Second, it is generally agreed that while sector-specific regulation remains in force, its substance should be aligned with that of competition law, by relying on competition law concepts and doctrines in the formulation of regulations. Such an approach might prove incompatible with the EC's WTO commitments since the regulatory principles contained in the Reference Paper are not and cannot be aligned with an international competition law framework that presently does not exist.

To take a concrete example, there is no guarantee that the new definition of Significant Market Power ("SMP"), *i.e.*, "a position equivalent to dominance, that is to say a position of economic strength affording [a firm] the power to behave to an appreciable extent independently of competitors", will cover the same firms as the definition of "major supplier" in the Reference Paper. It could be that a firm that would be considered as a "major supplier" within the meaning of the Reference Paper would not be found to have SMP under that new EC definition, thereby escaping obligations (especially as regards interconnection) that the parties to the Fourth Protocol have undertaken to impose on their "major suppliers".

In view of that possibility, the Access Directive makes room for SMP-type obligations to be imposed on firms without SMP in order to "comply with international commitments". Similarly, while the RP prescribes cost-orientation for the interconnection tariffs of major suppliers, the new EC framework leaves more discretion to the national regulatory authorities as to the remedies to be applied. Beyond that, it remains to be seen whether the new EC regulatory framework will remain as easily "exportable" on the international scene as the previous framework, in the absence of a consensus on the development of an international competition law instrument.

II. The United States and its WTO Commitments

Much like the EC and its Member States, the United States went through a major internal telecommunications law reform in parallel with the negotiations of the Fourth Protocol. Nevertheless, the U.S. telecommunications sector was by and large already liberalized, as reflected in the U.S. schedule of specific commitments, which contains no significant limitations other than a twenty percent limit on direct foreign ownership of telecommunications carriers.

The implementation of WTO commitments in telecommunications has proved far more eventful in the United States than in the EC, for a number of reasons. First of all, it was difficult for U.S. authorities to abandon the wide-ranging reciprocity principle that governed U.S. telecommunications policy before the Fourth Protocol. Second, U.S. policy on accounting rates provoked considerable friction with other WTO Members.

i. Abandoning reciprocity

Of all the parties in the NGBT and the GBT, the United States probably had the most developed international telecommunications policy. It had liberalized its domestic market for long-distance and international telecommunications early on, with the breakup of AT&T in 1984. The United States was ostensibly worried that, in an environment where international communications were still essentially conducted on a bilateral, correspondent basis, U.S. operators competing to handle the origination or termination of international calls in the United States would be vulnerable to foreign operators—generally monopolists—handling the other end of those calls.

The main problems relate to (i) *cross-subsidization*, whereby a foreign operator would use supra-competitive profits in its home market to undercut the prices of U.S. carriers in the United States or in other markets, and (ii) *bypass*, whereby a U.S. subsidiary or affiliate of a foreign monopoly or dominant operator would carry international traffic from that foreign country to the United States outside of the correspondent regime and thereby further distort the imbalance in settlement payments. In addition, the discrimination problem, discussed below in the context of accounting rates also arose from asymmetric liberalization.

As concerns *bypass* and *cross-subsidization*, the FCC introduced a new policy at the end of 1995. Pursuant to the U.S. Communications Act, FCC approval must in practice be obtained for foreign operators to enter the U.S. market. According to the relevant provisions of the Act, when examining requests the FCC is to have regard to "public convenience and necessity" or the "public interest". The FCC interpreted its legislative mandate so as to make its approval subject to the so-called "Equivalent Competitive Opportunities" ("ECO") test, whereby it must be shown that the country of origin of the foreign operator offers to U.S.-based operators equivalent competitive opportunities. Based on this provision, the FCC assessed whether the foreign market has been sufficiently liberalized, although it was willing to discount a perceived lack of liberalization in foreign markets against the procompetitive effects on the U.S. market from allowing the entry of the foreign supplier.

The U.S. policy was heavily discussed within the NGBT and GBT. It was argued by participants that it could not be maintained within the framework of GATS, since it breached the MFN obligation by differentiating between countries based on their perceived level of liberalization. Indeed the whole thrust of the Fourth Protocol, especially the additional commitments to the principles contained in the RP, was to address U.S. concerns by ensuring that all signatories create "effective competitive opportunities" and take it upon themselves to prevent anti-competitive behavior by their own operators, so that all markets could be opened at once without reservation, in conformity with the MFN principle. Accordingly, it was argued that the prior approval requirements of the Communications Act (and certainly the ECO test) should be abandoned as concerns WTO Members.

Although the U.S. Administration appeared to agree with the above reasoning, it indicated that it would not introduce legislation to implement the Fourth Protocol, but instead leave it to the FCC to amend its rules. That put the FCC between a rock and a hard place: on the one

hand, it has a statutory mandate to look after the public interest, which it cannot readily abdicate; on the other hand, it was being asked to implement an international agreement pursuant to which the MFN principle must be respected, and barriers to market access and national treatment must be removed.

The FCC sought to live up to the U.S. commitments with its 1997 Foreign Participation Order. In short, the FCC abandoned the ECO test for firms coming from other WTO Members, and replaced it with the following framework:

- Firms from other WTO Members may openly enter the U.S. market (*i.e.*, the FCC will presume that entry is in the public interest). However, the FCC reserved the right to "attach additional conditions" to authorizations if it finds that existing safeguards might not be sufficient to prevent "anti-competitive harm" and even, "in the exceptional case in which an application poses a very high risk to competition, [the right] to deny an application."
- Furthermore, national security, law enforcement, foreign policy and trade policy concerns will continue to be considered by the FCC in its decisions, although it is expected that they will rarely be brought to bear.
- At the same time, the FCC revised but ultimately kept in place a number of "competitive safeguards" designed to prevent the exercise of "foreign market power" on U.S. markets. For instance, U.S. carriers are prevented from accepting any "special concessions" from foreign carriers who have been found to be dominant on their end of the market with respect to international telecommunications services with the United States. Furthermore, U.S. carriers that are "affiliated" with (*i.e.*, more than 25 percent owned by) dominant foreign carriers are to be treated as dominant on the route to the country of that foreign carrier. They are thus subject to specific prior disclosure, structural separation and reporting obligations.

A similar approach has been put forward by the FCC for satellite communications. These new rules were criticized by many trading partners, including the EU. In short, they are considered to violate the MFN principle, which is central to the GATS. As far as market access is concerned, the treatment of foreign firms may differ depending on the perceived level of competition in their respective home countries. It could even be said that the "competitive safeguards", which do not restrict entry as such, are difficult to reconcile with the MFN principle. Even though the "competitive safeguards" apply to firms operating in the United States, they indirectly affect foreign carriers (which see their freedom to deal with U.S.-based carriers impinged) in a manner that varies depending on their respective home countries. Furthermore, despite FCC statements to the contrary, the thrust of the Reference Paper—in line with the MFN principle—is that each Member is meant to police its domestic market, so that the other Members can open their own markets "safely".

The relative fragility of the U.S. implementation of its WTO telecommunications commitments was made plain when Deutsche Telekom ("DT"), the German incumbent, sought FCC approval for its purchase of U.S. mobile operators Voice Stream and Powertel.

Before the FCC, a number of par ties intervened to ask the FCC to deny DT the necessary authorizations to carry out the transaction, on the ground that (i) state ownership of DT and/or (ii) DT's dominant position on many German markets created a risk of harm to competition in the United States, within the meaning set out in the *Foreign Participation Order* outlined above. The FCC firmly rejected these claims, finding among other points that state ownership of DT might put it at a competitive disadvantage, and that DT could not rely on its dominant position in Germany to engage in predatory pricing in the U.S., given the competitiveness of U.S. markets. Despite this encouraging result from the WTO perspective, the procedure was lengthy (seven months), costly (given the number of interested parties), and overlapped in part with the merger control activities of the Department of Justice.

In parallel with the FCC examination, some U.S. lawmakers (led by Senator Hollings), tried to place a bill on the agenda of Congress that would have prevented the FCC from granting the authorizations requested by DT. This was motivated by a concern that competition in the United States would be distorted by the entry of firms in which a foreign government has a significant stake. This bill provoked a fierce reaction from within the U.S. administration and also from the EU, which threatened to bring the matter before the WTO if the bill in question was passed. Ultimately, the bill was abandoned.

ii. Accounting Rates

There is a long-standing U.S. complaint about the functioning of international communications accounting rates. For a better understanding of the problem, it is necessary to explain briefly y the traditional way in which international communications were operated, namely the "correspondent system" set out in ITU Regulations. Under that system, the TO of the originating country cooperates with the TO of the terminating country to complete telephone calls or other services. The TO of the originating country alone collects a fee from the caller ("collection rate"). As between the two TOs, an "accounting rate" is agreed. For each minute of international traffic, the TO of the originating country owes a fraction of the accounting rate (usually half, called the "settlement rate") to the TO of the terminating country, in order to compensate the latter for the completion of the international call. The correspondent system works in both directions, so that a given pair of TOs will periodically offset the amounts due to one another. As a consequence, the TO from the country that originated the most traffic will make a payment to the TO of the other country. The correspondent system was developed earlier in the 20th century, at a time when almost all countries were served by monopoly TOs, often State-owned.

On its face, the correspondent system could work effectively when some or all countries have liberalized telecommunications services. However, a central weakness of the traditional system is that accounting rates are not required to, and in practice do not bear any relationship to either customer prices (collection rate) or underlying costs. As technological evolution reduced operating costs, the gap increased. This resulted in two undesirable consequences for traffic between countries that have liberalized the provision of international services and countries that have not done so.

First, in a liberalized country, competition among local service providers often brings down prices for international telecommunications, usually markedly below the prices in a non-liberalized country for the same call in the other direction. As a consequence, callers from a non-liberalized country will often try to originate their calls in the liberalized country to benefit from the lower collection rate. The balance of traffic between the liberalized and the non-liberalized country is then upset—more traffic originates in the liberalized country, and as a consequence the operators in the liberalized country must make large settlement payments to the TO of the non-liberalized country.

Second, operators from the liberalized country are prevented from reducing prices as much as they could because settlement rates are above costs. A large part of the settlement payments made to a TO from a non-liberalized country can arguably be viewed as a subsidy.

The United States was dissatisfied with the artificially high level of accounting rates in comparison to underlying costs, which they claimed led to payment outflows of up to five billion U.S. dollars, three-quarters of which were allegedly a subsidy to foreign TOs. The FCC, in particular, has led a campaign against the correspondent system as a whole (including above-cost accounting rates), which it perceives as a barrier to competition. More specifically, the FCC fears discrimination by the foreign operators towards the competing U.S. carriers, be it through preferential treatment of one carrier in the allocation of return traffic from the foreign operator to the United States, or through whipsawing (pitting competing U.S. carriers against one another in order to obtain discriminatory accounting rate concessions).

In order to alleviate those concerns, the FCC introduced an International Settlements Policy ("ISP") whereby competing U.S. carriers must be treated without discrimination and must receive a proportion of return traffic to the United States equal to their proportion of outgoing traffic (so-called "proportionate return"). The ISP can be counter-productive when applied to traffic between the United States and another liberalized country, since competition in both countries provides a safeguard against discrimination and the ISP prevents the emergence of innovative alternative arrangements for international traffic between the two countries. The FCC has accordingly decided to relax the application of the ISP in appropriate cases for traffic to and from countries that satisfy the ECO test.

Developing countries challenged the ISP, arguing that the high accounting rates, and the ensuing capital flows from developed to developing countries, are necessary to foster the development of the telecommunications infrastructure in developing countries. Furthermore, in a context where telecommunications are increasingly used for much more than simple voice telephony, an argument can be made that the accounting rate system amounts to a form of universal service financing mechanism at the international level, given that connecting developing countries also create value and benefits in developed countries (through network effects). From this perspective, it would make sense not to require developing countries alone to bear the cost of improving their telecommunications infrastructure and to transfer funds to them for that purpose. Yet the accounting rate system lacks a number of

safeguards that are essential for a good universal service financing system, especially as regards reporting.

The United States tried to place the issue of accounting rates on the table of both the NGBT and GBT, without much success. It appears that the United States already envisaged tying the award of licenses to foreign providers to the level of accounting rates between the United States and the foreign country in question. This would not have been compatible with the principle of MFN treatment, and it seems that other participants in the NGBT and GBT were uneasy with this U.S. approach. Ultimately, it was agreed in the Fourth Protocol that the issue of accounting rates would not be raised in WTO disputes until the beginning of the new round of services negotiations in 2000. That understanding was interpreted narrowly in Telmex.

The United States had already changed its course by December 1996. In connection with a downward revision of its benchmarks for accounting rates, the FCC proposed in its *International Settlement Rates* proceedings to impose, as a licensing condition on foreign carriers seeking to enter the U.S. market, a requirement that accounting rates move towards the benchmark rate. If this does not occur, the FCC envisaged various enforcement measures, including ordering U.S. carriers to settle at the benchmark rate with the foreign carrier in question.

That decision was challenged before U.S. courts by around one hundred governments, regulators and telecommunications firms, principally on the ground that the FCC had exceeded its jurisdiction by seeking to regulate the activities of foreign firms indirectly by pressuring U.S. firms to disregard agreed accounting rates. The U.S. Court of Appeals for the D.C. Circuit dismissed the suit.

Since then, the ITU has undertaken to reform the accounting rate system, and has come up with innovative proposals, including recognition that accounting rates should be costoriented, the creation of its own benchmarks (somewhat higher than the FCC's) and an acknowledgement that international telecommunications can be handled through means other than the traditional correspondent system. The status of the accounting rate system under the WTO remains uncertain, since on the one hand, the system itself—to the extent it can be presented as a State measure—would seem to be at odds with the MFN principle, and on the other hand, the FCC settlement rate policy is also questionable, if not on WTO grounds (MFN principle), then on other grounds related to international law (comity and jurisdiction). In any event, as between developed countries at least, the accounting rate system is being replaced by other arrangements more suitable to a competitive environment, such as self-correspondence (when a firm is present at both ends of the international communication), interconnection (with termination and origination charges) or peering/routing arrangements (with the transfer of traffic over to IP platforms). Indeed the Telmex Report deals with the international traffic between Mexico and the United States first and foremost as an interconnection issue. different from domestic not much interconnection. accounting rate system is seen as but one method to arrange international traffic.

The difficulties caused by the accounting rate system are now likely to take much more of a North-South dimension.

THE WTO TELECOMMUNICATIONS COMMITMENTS IN A BROADER <u>CONTEXT</u>

The WTO commitments on telecommunications, culminating with the Fourth Protocol, are in many ways ground-breaking. So far, this contribution has examined the specific provisions of the Fourth Protocol, and looked at them in the light of domestic telecommunications regulation. The following paragraphs look at broader issues.

I. Institutional setting: The WTO and the ITU

The launch of telecommunications negotiations in the course of the Uruguay Round amounted to a rebuke of the ITU by developed countries. The question was whether the WTO would take over the leading role in international telecommunications policy from the ITU, since the WTO's structure and operation appeared inherently better suited to a liberalized, competitive and global telecommunications environment. Indeed, the ITU reflected the old world order of telecommunications, with government representatives speaking for each Member's telecommunications sector, on all issues ranging from operations to regulation. Like the "correspondent system" (with accounting rates), that grew out of its discussions, the ITU seemed somewhat outdated and was rapidly losing significance.

To its credit, the ITU has sought to respond to the challenge by adapting to the new environment. For instance, it recognized that private actors (who can become industry Members of the ITU and participate in its activities) played the leading role in operations and that governments should concentrate more on regulatory issues. It tried to produce meaningful reform of the accounting rate system, but the pace of reform may not be quick enough and the whole system might disappear, at least for communications between developed countries. The ITU took measures to speed up its standardization process to respond to market realities, and it has become a credible actor for standardization in areas such as ASDL, Voice over IP and 3G. It has also taken up the task of helping to set up and train regulators in developing countries, and to transfer regulatory expertise from developed countries to developing countries.

At the same time, the above analysis of the Fourth Protocol should make it clear that if the WTO wants to pursue its work in the telecommunications area, it must go deeper into regulatory issues. In particular, as markets become more competitive, with a greater number of actors, matters such as frequency allocation, interoperability, compatibility and standardization will become increasingly significant. On these matters, the WTO has little experience, while the ITU has expertise and is keen to maintain its pre-eminent role.

Accordingly, the WTO and the ITU have concluded a co-operation agreement to formalize their relationship and ensure the co-ordination of their respective activities. It is likely that the two organizations will become partners in the management of international telecommunications regulation, with the WTO perhaps focusing on general issues of

economic regulation, as well as enforcement, and the ITU taking care of more technical issues, including frequency allocation and standardization.

II. Beyond telecommunications: convergence with media, electronic commerce

Given the convergence with neighbouring sectors and the rise of electronic commerce, the telecommunications sector is becoming a part of a broader whole. This will affect the negotiations of future WTO commitments.

The first contributions from the EC and the United States to the services negotiations that commenced in the year 2000 already showed some differences in approach. The EC would essentially like to improve the commitments made so far by ensuring that every Member removes scheduled restrictions, commits to the entire Reference Paper and eliminates MFN exemptions. The United States would like to go further and, beyond the improvement of commitments, would promote privatization and enhance telecommunications commitments by opening up (or opening further) a number of related areas.

Significant debate is also likely to arise in the WTO framework concerning convergence, *i.e.*, acknowledging that telecommunications are now becoming part of a larger sector together with media and information technology. In the Uruguay Round, the EC was very reluctant to enter into any commitment concerning the audio visual sector. The EC was concerned that liberalizing the telecommunications sector might undermine its cultural reservations in the audiovisual sector. That issue was solved by the EC making an explicit reservation in its schedule of commitments that telecommunications does not extend to broadcasting, namely "the uninterrupted chain of transmission required for the distribution of TV and radio program signals to the general public".

Furthermore, the EC expressly noted in its schedule that its commitments do not cover "content provision which require[s] telecommunications services for its transport". This reservation was apparently accepted by other signatories to the Fourth Protocol, although it leaves certain services, for instance, the distribution of audio or video files via the Internet, in a grey zone. Now that the EC has decided to introduce a single internal regulatory framework for telecommunications and broadcasting networks and services, it will be increasingly difficult to defend treating telecommunications and broadcasting separately at the international level.

Against that background, the United States has already indicated that it would like to include the audiovisual sector in the current round of negotiations. The controversy over content regulation in the audiovisual sector is therefore likely to flare up again. This time around, it seems difficult to envisage an agreement to disagree. Convergence will force a re-thinking of the rationale underpinning content regulation (is it the content itself or rather its means of distribution?), with the answer likely to depend on the aim of content regulation (e.g., diversity, protection of minors or consumer protection).

In addition to a repeat of the "audiovisual" controversy, foreseeable difficulties in dealing with convergence at the WTO level include:

- o Scheduling: The current structure of GATS schedules embodies pre-convergence thinking. Already, there is no consensus on the definition of telecommunications services. In addition, telecommunications services are listed separately from audiovisual services, and no room is made for hybrid services that might fall between these two categories (for instance, video-on-demand or music download services). Even if modifications to the structure of the schedules represent major negotiating processes, they might be necessary in order to take convergence fully into account. The offers made by the US and the EC in 2004 go once more in different directions. In their offer, the United States appear not to move away from the distinction between basic and value-added/enhanced services, However, in line with recent developments in US telecommunications regulation, they are replacing the latter category with "information services". Note that as a result of recent FCC decisions, all broadband services have been classified as "information services" and in fact deregulated. The end-result of the WTO regime for telecommunications services US proposal is broadly to open the "converged" sector, but also to leave it outside of regulatory schemes, effectively reducing the ambit of the RP to "legacy" services already offered before liberalization. In contrast, the EC removes the distinction between basic and value-added services, and proposes commitments telecommunications services in general (note that the RP commitments are limited to basic services, however). Yet the EC holds on to the telecommunications/broadcasting distinction, offering no commitment on the latter, and seeks to maintain most of its article 2 Exemptions relating to audiovisual services.
- O Treatment of regulatory constraints: The same scheduling difficulties that beset the NBGT and GBT will surface once more. For instance, how is a must-carry rule—whereby network operators are bound to transmit certain content, e.g., a public broadcasting channel—to be considered? Is it a restriction on market access or national treatment that must be listed in a schedule, is it part of a regulatory framework conducive to entry (like the Reference Paper), or is it none of these, and thus left to be dealt with under the rules concerning domestic regulation?
- Technological neutrality: The mantra of "good regulation" in the convergence era can mean many things. It could imply a preference for competition law over sectorspecific regulation, because competition law would be framed in technologically neutral terms. It could also mean that decisions on standardization or frequency allocation would become relevant from the point of view of trade law, should they imply a preference for one technology over others.

Finally, the WTO has also taken up discussions on electronic commerce. So far, there has been a lot of soul-searching over whether electronic commerce should be considered under the GATT or the GATS framework. So far, that issue has not been settled. Discussions are continuing under the direct supervision of the General Council. In the meantime, WTO members are maintaining a moratorium on imposing customs duties on electronic transmissions.

MILESTONE OR STEPPING STONE? A CONCLUDING ASSESSMENT

From a telecommunications perspective, the Fourth Protocol marked the beginning of a new era, though its immediate impact should not be overestimated. For a number of significant players, like the EU and the United States, the Protocol essentially consolidated at the international level the liberalization movement to which they were already committed nationally. Other, notably developing, countries claimed long transitional periods or significant exceptions for their liberalization commitments. Furthermore, while the RP represents a useful recognition that the liberalization of monopoly sectors has to be accompanied by additional regulatory and competition law commitments, much unfinished business remains.

In sum, the agreement reached in 1997 can be said to constitute a beginning, and a useful one at that. It will nevertheless take a sustained effort to further develop a suitable legal framework that will deliver the full benefits of the ongoing telecommunications revolution. Furthermore, new issues like convergence and electronic commerce will also force the current arrangements to be reconsidered and improved.

The obligations outlined in the Reference Paper will have to be strengthened as well, although the *Telmex* Report of April 2004 demonstrates that these obligations can already bite. Preferably, the RP obligations should also become part of a WTO agreement, rather than remain a patchwork of individual commitments, so as to ensure a modicum of uniformity, and predictability in their interpretation and enforcement. Yet even if the WTO membership were to negotiate a comprehensive competition law agreement, this would not eliminate the need for an agreed Reference Paper. In part this is because general competition law is unlikely any time soon to replace the regulatory principles necessary to open up and further heretofore competition ensure effective in heavily regulated industries telecommunications.

Accordingly, while a WTO competition law agreement might adopt and reinforce parts of the Reference Paper, a need for sector-specific regulation in the telecommunications industry is likely to remain. In this respect the Reference Paper can serve as a checklist. It demonstrates to the WTO membership the additional commitments that are necessary to effectively liberalize other regulated service industries such as the post, energy and air transport.

LIBERALIZATION IN TELECOMMUNICATION SERVICES UNDER THE URUGUAY ROUND

This Section is based on a combination of recent information and the WTO Document of December, 1998. The overall picture is the same with each of these two information sources.

a. Classification of Telecommunications Service Sectors and The Commitments Made by Various WTO Members

The Services Sectoral Classification List provides a classification of the telecom sector into seventeen categories. These are mentioned in the first column, fourteen categories from "a" to "n", and three "other" categories under "0". Though these services are classified separately in

the List, the ongoing convergence arising due to technological and market developments is blurring the distinctions among some of these categories. Packaging and provision of various services by the same operator will increasingly become a norm in the future. Nonetheless, given the type of information available, this Section will provide the relevant information for these sectoral classifications.

In the list of sectors, the term "basic telecommunications" is used to cover the services in categories "a" to "g" in Annex Table 1, and certain other services such as mobile communication that provide real-time transmission of customer supplied information. Other service categories are considered as "value added telecommunications services".

As of January 2000, 93 WTO Members had included telecommunications services in their Schedules of Commitments. Basic telecommunications is included in the schedule of commitments of 83 WTO Members and value added services have been committed on by 72 Member governments. In addition, 72 Members have committed on some or all aspects of the Reference Paper. Of these, 66 have accepted the Reference Paper in its entirety or with minor modifications. All industrialized countries have taken commitments on basic telecommunications, most value-added sectors, and the Reference Paper.

b. The Nature of Commitments Made in The Schedules Including the Types of Limitations on National Treatment and Market Access

Most WTO Members have made partial commitments. Further, such partial commitments were made much more for the mode of supply "commercial presence", than for other modes of supply. Another noteworthy feature is that the mode of supply "commercial presence" is also subject to the highest number of limitations. For "national treatment", most limitations relate to "nationality requirement", followed by limitations relating to residency requirement, authorizations requirements, and ownership of property land. The number of limitations for "market access" are much more than those for national treatment. These relate mainly to limitations on number of suppliers, types of legal entities, and participation of foreign capital.

Although there was general appreciation among Members that the accounting rate regimes in place would not be able to withstand the pressures brought about by competitive markets, it was decided to secure a shared understanding that Members wouldnot challenge each other's accounting rates under the WTO's dispute settlement regime. Further, it was agreed that the understanding would be reviewed no later than the commencement of the new services negotiations, from 1st January 2000. However, certain countries (as mentioned above) included exemptions to the most favoured nation (MFN) rules with respect to their accounting rate systems.

Exemptions to MFN Treatment

Exemptions to MFN treatment for telecommunications were taken by: **Antigua and Barbuda** (relating to Government extending to nationals of other Caricom-member countries treatment equal to its own nationals); **Argentina** (supply of fixed satellite services by

geostationary satellites); **Brazil** (relating to distribution of radio or television programming directly to consumers).

Bangladesh, India, Pakistan, Sri Lanka (the possibility of permitting Government or Government-run operator to apply differential measures, such as accounting rates, in bilateral agreements with other operators or countries); Turkey (relates to two neighboring countries regarding fees for transit land connections and usage of satellite ground stations, and to the possibility of permitting Government or Government run operator to apply differential measures, such as accounting rates, in bilateral agreements with other operators or countries); United States (for one-way satellite transmission of DTH and DBS television programming directly to consumers).

We compare below commitments made by India with commitments made by certain WTO members whose commitments cover a relatively large number of service sectors (namely, Australia, Canada EC, United States and some of the countries in the Asian region (e.g., China and Sri Lanka). A consideration of the commitments made by these WTO Members would also provide an indication of the types of commitments that would be expected from India.

Australia has:

- offered unrestricted competition in virtually all basic telecom services as of July 1997;
- committed on existing free markets for voice telephony on a resale basis and many other basic services;
- In case of basic telecom services, restrictions in Mode 3 such as primary supply of satellite services shall be limited to 2 service providers till June 1997, primary supply of public mobile cellular telecom services will be limited to three service providers has been removed.
- offered no limits on foreign equity for new carriers;
- Foreign equity limit has been specified in Telstra (licensed general carrier) as: Legislation permitting the sale of one third of the government's equity in Telstra comes into effect on 1 May 1997. Foreign equity will be limited to 35%; of this one third (about 11.7% of total equity) with a limit of 5% of the one third (about 1.7% of total equity) available to individual or associated group foreign investors.
- The restriction in NT that the chairman of Optus (holder of general carrier and mobile license) must be Australian citizen has been removed.
- Committed to the Reference Paper on regulatory principles.
- The value-added services sector remains fully liberalised as before.

Argentina has:

 agreed to phased-in commitment liberalizing voice telephony (local, long distance, and international) and provision of other basic telecom services supplied on an international basis by November 2000;

- agreed to offer full competition in basic services other than voice, such as data transmission, etc. supplied in the national market and leased circuit services (international and national) without phase-in;
- agreed to open competition in mobile telecom services such as data, paging, and trunking.
- committed on duopoly in mobile cellular services and undertaken to allow new entrants subject to an economic needs test for the provision of mobile Personal Communication Services;
- committed to the Reference Paper on regulatory principles;
- submitted an MFN exemption list on telecommunications services involving the supply of fixed satellite services by geostationary satellites.

Hong Kong:

- In case of local basic telecommunication services, restriction on the issue of license for local fixed network services has been removed in Mode 3 and hence they have opened up this mode fully.
- In case of value-added services, the list of services has been expanded and now includes all those services in the WTO 120 list. This sector was unbound in Mode 1 (MA & NT) and Mode 2 (NT). These modes have no restrictions now.
- In Mode 3 restriction that the commercial presence must take form of a company has been removed and this mode is open fully.

The United States has:

- committed to open markets for essentially all basic telecom services (facilities-, based and resale) for all market segments (local, long distance, and international), including unrestricted access to a common carrier radio licenses for operators that are indirectly foreign owned;
- made the offer to also cover, for example, satellite-based services, cellular telephony and other mobile services:
- limitations on market access include no insurance of radio licenses to operators with more than 20% direct foreign ownership
- Restriction that Comsat retains exclusive rights to links with Intelsat and Inmarsat satellite capacity has been removed;
- committed to the Reference Paper on regulatory principles;
- The list of value-added service has been changed to the WTO 120 list. This sub sector is completely liberalized.

European Community:

- In case of value-added services, the list has been expanded to include all the services.
- For domestic and International Services provided using any network technology on a facility based or resale basis for public and non public use there are no limitations on market access and national treatment i.e. modes 1, 2 and 3 are fully liberalised.

Canada:

- For Basic telecom services-in case of Mode 1, regulations on routing of Basic telecom services between points within Canada and points outside Canada has been removed.
- In Mode 3, foreign investment restriction is as follows:
- -in facilities-based telecom services: 46.7% of voting shares, based on 20% direct and 33.33% indirect investment
- -100% for operations conducted under an international submarine cable license
- mobile satellite systems owned and controlled up to a level of 100% by a foreign service provider may be used by a Canadian service provider to provide services in Canada;
- -100 % foreign equity in service providers of basic telecom services supplied on a resale basis.
- Removed the restrictions such as right to obtain a license to land a submarine cable and limited license to operate earth stations for the provision of Canada-U fixed satellite service

Singapore:

- In case of basic telecom services (facilities-based), restriction in Mode 3 that upto two additional operators will be licensed in 1998 for provision of services commencing April 2000 has been removed.
- Foreign investment restriction is as follows:
- -cumulative total of 73.99% foreign shareholding, based on 49% direct investment and 24.99% indirect investment is allowed.
- In case of mobile services foreign investment restriction is same as above
- Value added network are now subject to license from Infocomm Development Authority of Singapore while earlier it was subject to Telecom Authority of Singapore.
- The restriction that foreign companies are required to set up a local branch office of their company duly registered with Registry of Companies and Business has been removed.

Sri Lanka has committed to:

- Do away with the restriction of duopoly in international basic voice services
- Restriction of foreign equity participation of up to 35 % for a strategic partner in the government owned SLT has been removed;
- four operators licensed for local and domestic long distance mobile cellular services;
- two licenses (in addition to SLT) for supply by wireless and local loop of basic voice telephony, data transmission, payphones, voice mail and fascimile (the two licensees are guaranteed exclusivity for five years);
- five licenses for public payphones services and for paging services licenses with possible additional suppliers of each to be permitted subject to economic needs tests;
- six operators in data communication services;

- foreign equity up to 40 % for all suppliers other than SLT, with investments over 40 % subject to case-by-case approval;
- For NT modes 1 2 and 3 have been fully liberalized
- For MA modes 2 and 3 have been fully liberalized

Further, Sri Lanka indicated that issuance of licenses was under consideration for GMPCS services supplied through own gateways. It submitted an MFN exemption to permit the Government, or the Government-run operator to apply differential measures, such as accounting rates, in bilateral agreements with other operators or countries.

China:

- For Basic and value added telecommunication services geographical restriction has been removed and foreign equity limit has been enhanced from 30 % to 50 per cent.
- For Mobile Voice and Data Services, permitted foreign equity upto 49 % and committed to remove geographical restrictions in 5 years.
- Modes 1 2 and 3 are fully liberalized for NT
- Committed fully to the Reference Paper
- Further liberalization including level of foreign equity participation to be discussed during negotiations

Switzerland:

 No limitations have been listed for modes 1, 2 and 3 for both market access and national treatment.

A comparison of commitments made by the above countries with that made by India could indicate the limited nature of India's commitments. These are as follows:

(a) For voice telephony

- there will be of one operator other than DOT/MTNL in each service area for a period of 10 years after which the position will be reviewed;
- The private operator should be a company registered in India in which total foreign equity must not exceed 25%;
- The service operator will be permitted to provide long distance service within the licensed service area only;
- Resale of voice telephony will not be permitted, but licensees can grant franchises for providing public call offices service.
- In the case of foreign investors having prior collaboration in that specific service sector in India, FIPB approval would be required.

(b) For circuit switched data transmission services:

(c) For facsimile services:

(d) For private leased circuit services:

- The private operator should be a company registered in India in which total foreign equity must not exceed 25%;
- The service operator will be permitted to provide long distance service within the licensed service area only;
- In the case of foreign investors having prior collaboration in that specific service sector in India, FIPB approval would be required.

(e) cellular mobile telephony:

- There will be two cellular operators in each service area, including one public sector operator;
- The private operator should be a company registered in India in which total foreign equity must not exceed 25%.
- The service operator will be permitted to provide long distance service within the licensed service area only;
- (f) has MFN exemptions with regard to accounting rates.
- (g) Additional commitments taken are as follows:
 - commitment to a <u>revised text (i.e. revised by India for its purpose) of the Reference Paper for regulatory framework.</u> This revised text either deletes some provisions from the Reference Paper or alters it to clarify India's commitment. *Annex VII* compares the relevant text of the Reference Paper and the commitment made with respect to those provisions by India.

Thus, India's commitments relating to the Reference Paper do not include the following disciplines that are contained in the text of the Reference Paper:

- should not engage in anti-competitive cross-subsidization;
- provision of interconnection in a timely fashion on terms and conditions and cost oriented rates that are transparent, reasonable, and sufficiently unbundled; provide interconnection at any technically feasible point in the network;
- make publicly available the period of time normally required to reach a decision concerning an application for a license;
- make known to the applicant for a license, upon request, the reasons for the denial of a license;
- Detailed identification of frequencies allocated for specific government uses.

Compared to the commitments made by India in the last round, the current offer covers new areas. The restriction that only licensed voice telephony service providers can provide data, facsimile and private leased circuits has been dropped from India's list of offer, as has been the constraint to deploy only GSM technology for cellular mobile service provision. India has thus offered to maintain technology neutrality in the grant if cellular mobile licenses. Additional commitments to review the opening of the national and international service have been deleted in India's latest offer. As stated later these had become redundant given domestic developments. Further there is now no restriction on the number of players in Basic,

national and international service. India has committed to unlimited competition in these service segments. However, the commitment to allow foreign equity participation upto 25 % only has not been relaxed. In the case of foreign investors having prior collaboration in that specific service sector in India, FIPB approval would be required. Perhaps, this provides the window for enhanced foreign equity participation subject to FIPB approval which is normally done on a case-to-case basis.

COMPARISON OF WTO COMMITMENTS MADE BY INDIA WITH THE ACTUAL POLICY IMPLEMENTED/UNDER CONSIDERATION

India has made commitments only under mode 3 (i.e. commercial presence) except for voice and electronic mail where mode 1 is fully open. Mode 4 for this sector is covered by its horizontal commitments which are limited to the entry of and temporary stay of business visitors, intra-corporate transferees like managers, executives and specialists and professionals.

Comparison of the WTO commitments of India with the applicable regime as it has evolved over the last ten years reflects the fact that the applicable regime is far more liberal than the commitments made by India. As detailed in Section 2 above, some of India's recent policy initiatives render India one of the more liberalized telecommunication economies in the region. Given liberalisation of the sector at home and the limited nature of India's commitments, the gap between the commitments and applicable regime has widened.

India is already operating a more liberal regime in relation to its commitments under the WTO. For instance, in Basic Services, it has committed to a foreign equity participation of 25% in the joint-venture projects, while actually it is already permitting 49% foreign equity participation. This cap may be further relaxed to 74 % in the near future. For market access, India's commitment is to allow duopoly in both basic and cellular services, while the applicable regime does not place any restrictions on the number of service providers. Similarly, for NLD and ILD services, the applicable regime provides for unlimited competition, while India's commitment is to allow one service providers for each service.

In respect of the principles in the RP, although India has not fully committed to these principles, the existing regulations are fully compliant. The RP provides safeguards for competitors by preventing dominant or incumbent carriers from engaging in anti-competitive practices. India has not committed itself to not engaging in anti-competitive cross-subsidization, non-discriminatory terms and conditions and rates for interconnection, nor to interconnection in a 'timely fashions on terms and conditions and cost-oriented rates that are transparent, reasonable and sufficiently unbundled'. India has also not agreed to provide interconnection at "any technically feasible point in the network" but "at any specified feasible point in the network as indicated in the license".

However, it is noteworthy that the conditions relating to interconnection specified in the RP are enforced by TRAI in its Regulations pertaining to interconnection. This includes provision of interconnection in a timely fashion on terms and conditions and cost-oriented rates that are transparent, reasonable, non-discriminatory and sufficiently unbundled.

Likewise, a judgement of TRAI has decreed that interconnection should be provided at any technically feasible point in the network. Moreover, an operator with Significant Market Power (SMP) must make a Reference Interconnect Offer (RIO) publicly available. *Annex VIII* provides details of RIO. This is in keeping with international best practices for timely and efficient provision of interconnection to new entrants. SMP has been defined to mean a service provider holding 30 % of total telecommunication activity in a licensed service area.

Further, the intense competition that has materialized in the sector together with a cost based IUC regime makes it unlikely for any operator to engage in anti-competitive behaviour. In any case TRAI retains the right to intervene in any tariff that can materially affect competition.

Thus, certain regulatory disciplines committed by India (in terms of the Reference Paper), are less onerous than the disciplines actually applied in practice. In fact the Authority has emphasised a number of pro-competitive measures that go beyond the confines of the Reference paper, such as to achieve a full shift to forward looking long run incremental costs (FLLRIC) in a gradual manner over time.

Not only therefore is the applicable regime more liberal than India's commitments, the recent offers made by India in the sector do little to change this picture. For example, the extent of foreign investment in Indian companies providing telecom services is much more than the maximum of 25 % that has been offered in the WTO. Interestingly, India's offer is identical to the commitment made in 1997 in this respect.

Likewise for the internet sector, which is likely to provide a basis for much of the dynamic telecom-based activity in the future, India has a very liberal regime. The main feature of the policy, announced in 1998, and modified from time to time include, for example:

- No restriction on the number of service Providers:
- Operation could be on national, regional or on district basis;
- Service provider has option of building or leasing capacity from infrastructure owners (Railways, energy utilities);
- Foreign equity participation capped at 74 percent (100 % is also allowed but in that case the ISP cannot set up International Gateway)
- No prior experience in IT and telecom required;
- Licenses to be issued for a period of 15 years, extendable by 5 years;
- No license fee for the first 5 years. Token fee of Re 1 per annum thereafter;
- Service Providers allowed to set up International gateways after obtaining security clearance;
- Telephony on Internet permitted with effect from 1 April 2002 (except NLD);
- Access to internet through authorized Cable Operator shall be permitted without additional licensing subject to applicable Cable Laws (The Cable Television Networks (Regulation) Act, 1995) as modified from time to time.
- 'Last mile' linkages permitted from April 2004 within local area for ISPs for establishing their own last mile to their customers.

• Freedom to fix tariffs. However, the TRAI may review and fix tariff at any time during the validity of the license.

Permission to establish own last mile link is a significant and important change and underlines the liberal regime adopted in regard to internet service. Another change that is likely in the near future is permission to allow internet telephony within India. At present internet telephony is allowed for international calls only.

India has also implemented a non-distortionary Universal Service regime which is funded by a share of revenue from all service providers and is therefore administers in a 'competitively neutral manner'. In its most recent offer, India has offered to having a Regulatory Body, which is separate from and not accountable to any supplier of basic telecommunication services. In any case, the TRAI Act, guarantees this separation.

An earlier concern about the allocation and use of scarce resources wherein India has not committed to doing so in a transparent and non-discriminatory manner has been addressed in India's recent offer. The text of India's offer is exactly the same as in the RP.

"Any procedures for the allocation and use of scarce resources, including frequencies, numbers and rights of way, will be carried out in an objective, timely, transparent and non-discriminatory manner. The current state of allocated frequency bands will be made publicly available, but detailed identification of frequencies allocated for specific government uses is not required".

In sum, the applicable regime is more liberal than India's commitments under WTO. The recent offer made by India does not bridge this gap. The application of regulatory principles in India is much stricter than the commitments by India under the GATS and we now have a world class regulatory regime. Further, India is embarking on liberalization in a number of telecom sectors, and the actual extent of liberalization is likely to be increased even more in the future, bearing in mind that the negotiations at WTO will take a few years to be concluded.

Therefore, two important questions for India during the negotiations will be:

- 1. To what extent to bind the existing regime (and further liberalisation in the near future under ongoing negotiations);
- 2. What are the likely demands of India's trading partners beyond the existing regime and to what extent should such demands be considered?

Current negotiations

Telecommunications, like other services, are included in the services negotiations, which began in January 2000. In the current Doha Round of negotiations, additional market opening as well as the binding of recent reforms (i.e. a commitment not to increase a rate of duty beyond an agreed level) in telecommunications is the objective of many of the negotiating requests made by WTO members to their trading partners. As of July 2008, 39 governments

had made offers to improve their existing commitments or to commit for the first time in the telecommunications sector.

At the Hong Kong Ministerial Conference (December 2005), a new sector-specific negotiating mechanism was mandated by the trade ministers. Negotiating objectives outlined by WTO members in the Chairman's note to the Trade Negotiations Committee include:

- achieving broad coverage in a technology-neutral manner and significant commitments in all modes of supply
- working with least-developed countries and developing countries to find ways to encourage new and improved offers and to provide technical assistance to support this process
- reducing or eliminating exclusive rights, economic needs tests (i.e. a test using economic criteria to decide whether the entry into the market of a new foreign firm is warranted), restrictions on the types of legal entity permitted, and limitations on foreign equity
- commitment to all provisions of the telecommunications Reference Paper
- the elimination of exemptions to most-favoured nation (MFN) treatment (i.e. non-discrimination)

Plurilateral negotiations have followed, with progress reported regularly to the Special Session of the Council for Trade in Services.

Throughout the negotiations, individual members or groups of members have submitted proposals or other statements outlining their positions and objectives on various issues arising in the negotiations.

TELECOM POLICIES OF OTHER WTO MEMBERS THAT INDIA SHOULD CONSIDER DURING GATS NEGOTIATIONS

India's main objectives in the area of telecom include provision of world class telecom services at affordable prices, and achieving the Universal Access objectives.

Access to world class technologies is possible through procurement of such technologies by the existing service providers and through investment by other service providers. Both these depend not on policies of other countries but on our own policies, including policies related to provision of band-width to service providers. This is particularly because in the telecom market, a number of investors and technology suppliers are seeking markets for their operations, and from India's perspective, these attempts are not restricted by policies of other countries.

Likewise, provision of world class services requires enhanced interaction among various networks, and the regulatory principles required for this purpose depend on our own policies and not on those of other countries. The same is valid also for meeting India's Universal Service Obligations.

i. External constraints on India's exports of telecom services under supply "Commercial Presence"

Discussions with representatives of some major telecom service providers in India (Reliance, BSNL, MTNL, VSNL, Bharti Telecom) suggest that at present there does not seem to be any major constraint on India's telecom operations abroad, including with respect to any planned investments abroad. In general, Indian telecom companies are not planning investment in telecom ventures in industrialized countries. In any event these markets are relatively open, in case Indian firms contemplate operations there.

In certain cases where investment abroad may be considered by the major Indian companies, request for such investment comes from the Governments of the countries concerned. This implies that, in effect, investments abroad contemplated by Indian telecom companies are unlikely to face much constraint. Nevertheless, for long term interests, these countries must be asked to make multilateral commitments, including to the RP.

ii. External constraints on India's exports of telecom services under "cross border" and "consumption abroad" modes of supply

Cross border supply of Indian telecom services relates to provision of telecom services to those outside India seeking to get in touch with persons in India, for example, through international calls/internet. For these services too, there does not seem to be any significant demand from India regarding liberalized polices of other countries. Rather, India has to make efforts to improve its capacity and environment for increasing the supply of such exports.

Exports of telecom services through the mode of supply "consumption abroad "involves sales of telecom services in India to foreign consumers. For this mode too, there is unlikely to be any negotiating demand from India on other countries.

Since telecom is used as a means of supplying other services, an important feature regarding these two modes of supply for telecom is that the trade regime for other products (for which telecom is used as an input) would have a bearing on exports of telecom itself. It is difficult to identify these other services *a priori*, because they would also include services linked to e-commerce and call centres. However, to the extent that these involve some of the existing important services, such as financial services, the policies relating to them are covered in the studies prepared on those services.

iii. External constraints on India's exports of telecom services under the mode of supply "movement of natural persons"

Movement of natural persons is not a common mode for supply of telecom services. Therefore, there is unlikely to be any specific negotiating demand from India with respect to, this mode of supply for telecom. To the extent that there is the general issue of greater access to foreign markets through "movement of natural persons", this would be covered by the

study prepared on this topic. Likewise, any such demand for certain sectors that use telecom, facilities, such as software, is covered by the studies on those sectors.

Thus, it seems that in the area of telecom, India is likely to make little, if any, demand with respect to policies of other countries. There is, however, a likelihood that other countries will demand commitments from India regarding its telecom policies. In this situation, Indian negotiators will have to consider whether, and to what extent, they would like to exchange concessions made by India in telecom with concessions obtained by India in other sectors.

MODULE-IV

INTERNATIONAL TRADE IN OUTER SPACE ACTIVITIES

INTERNATIONAL TRADE LAW IN OUTER SPACE

International trade law regulates the movement of goods, services, and information across international boundaries and between persons of different nationalities. Participants in outer space activities – whether businesses, research centres, or space agencies – cannot operate effectively without understanding how international trade laws implemented and enforced by national governments can impact upon the execution of their missions. International trade law compliance is an essential element of planning research, development, production and operational activities.

International trade compliance requirements can be highly technical from a legal and engineering perspective. Appropriate resources must be allocated to analyse carefully and incorporate properly into planning, requirements and timelines in all facets of space industry activity, including design, development, production, launch, and pre- and post-launch activities. They require oversight and monitoring across different disciplines and functions within an organisation. Failure to do so can give rise to problems with partner governments and private actors, operational delays, and monetary, administrative and even criminal penalties. This chapter provides an introduction to several key international trade regulatory areas, focusing on the United States (US) and European Union (EU) legal regimes:

- export controls;
- · sanctions; and
- import controls.

The chapter also touches on the trade-related aspects of international agreements relating to outer space activities and concludes by offering a number of best practices and compliance tips for trade practitioners.

EXPORT CONTROLS

Overview

Export controls are the natural place to begin a review of relevant international trade laws because they represent some of the most significant restrictions on the free exchange of space-related hardware, technology, software and services between different countries. In general, export controls regulate the transfer of items from one country to another or to the citizens of another country. Export controls on items relating to outer space activities most often arise out of international security and foreign policy concerns because space-related end items, such as launch vehicles and spacecraft, are dual-use items (ie, items that can serve both military and commercial purposes). The following describes the most relevant multilateral frameworks that form the foundation of national export control laws relevant to the space industry, followed by a discussion of relevant US and EU national laws.

Multilateral frameworks

Many countries participate in multilateral export control regimes to co-ordinate their national export control policies. In general, multilateral export control regimes are not legally binding

arrangements under international law, but provide a forum for the co-ordination of member States' domestic export control policies. For the space community, the Missile Technology Control Regime (MTCR), which is concerned with the export of missiles capable of delivering weapons of mass destruction, and the Wassenaar Arrangement, which is concerned with conventional arms and dual use items, are the most relevant. These two regimes directly influence the promulgation of export control laws at the national level for space-related items and technology.

(a) Missile Technology Control Regime

The MTCR seeks to monitor and limit the proliferation of missiles, rockets (including space launch vehicles and their major components), unmanned air vehicles and related technologies capable of delivering weapons of mass destruction. Seven original members (Canada, France, Germany, Italy, Japan, the United Kingdom and the United States) established the MTCR in 1987; it now includes 35 members in total, including Russia, South Korea and Ukraine, and two non-member adherents. India most recently joined as a member in June 2016. A number of countries with advanced space capabilities, including the People's Republic of China (PRC), Iran, Israel, and North Korea, are not members. The MTCR achieves its objectives through plenary meetings, information exchanges and its members' adherence to common export policy guidelines.

The MTCR Equipment, Software and Technology Annex (MTCR Annex) serves as the control list for the regime and organises controlled items into two categories: • Category I, which controls complete rocket systems capable of delivering a payload of at least 500 kg to a range of at least 300 km, including major subsystems, technology, and software thereof; and

 Category II, which controls related components of rocket systems and complete systems with a range of at least 300 km.

The participating members also maintain the MTCR Guidelines, which inform the national implementation of MTCR Annex controls. Additionally, the US maintains a separate public resource, the *MTCR Annex Handbook*, which serves as a useful technical reference and visual guide for practitioners who manage MTCR oriented export controls.

(b) Wassenaar Arrangement

The Wassenaar Arrangement seeks to contribute to regional and international security and stability by prescribing export controls on conventional arms, dual-use items and related technologies through the publication of detailed lists of items that should be controlled by member governments. For the space community, these controls extend to spacecraft and nearly all critical components of spacecraft and ground equipment, including certain antenna systems, attitude control systems, navigation systems, propulsion systems, and associated sensors and radiation hardened electronics, among others. Additionally, the controls cover launch vehicle systems and related components using a broader approach than the MTCR.

States participating in the Wassenaar Arrangement implement these controls through varying national procedures.

The Wassenaar Arrangement's control lists include:

- the List of Dual-Use Goods and Technologies, and
- the Munitions List.

The dual-use list also includes two subsections identifying 'Sensitive' and 'Very Sensitive' items from that list. The Criteria for the Selection of Dual-Use Items, in addition to guidelines and best practices issued by the participating States, inform the implementation of the controls.

The Wassenaar Arrangement came into effect in 1996 following the dissolution of a Cold War-era predecessor organisation, the Coordinating Committee on Multilateral Export Controls (COCOM). The arrangement currently has 41 member States. Membership among major spacefaring nations includes France, Italy, Japan, Russia, South Korea, Ukraine, the UK and the US. The PRC, India, Iran, Israel and North Korea are currently not members.

US export controls

(a) Overview

Export controls in the US primarily comprise two major regulatory regimes: • the International Traffic in Arms Regulations (ITAR), and

• the Export Administration Regulations (EAR).

The ITAR is administered by the US Department of State through the Directorate of Defense Trade Controls (DDTC), while the EAR is administered by the US Department of Commerce through the Bureau of Industry and Security (BIS). The ITAR regulates the export of military commodities, technical data and services and requires authorisation from DDTC for all exports either through an agreement, licence, or exemption. The EAR regulates the export of purely commercial items, dual-use items and certain munitions items that have been transferred from the ITAR to the EAR as a result of recent export control reforms. The EAR requires licensing based on the classification of an item under the EAR, its destination, intended end use and the identified end-user.

US law makes clear that the launch or re-entry of a space launch vehicle, re-entry vehicle or payload is not deemed to be an export or import. Rather, with the exception of technology transfers that occur in outer space (eg, on the International Space Station), the significance of export controls to the space community pertains to terrestrial exchanges of hardware, services, software and information. For example:

- an 'export' under the ITAR or EAR can occur within a single country when technology is transferred to a person from another country; and
- intangible and electronic transfers, such as conversations, emails, and server access, fall within the regulatory definition of 'export'.

The ITAR and EAR also apply to US-origin items after they have left the US (eg, where they are re-exported or transferred to other parties). Moreover, these laws apply to non-US persons in their handling of US-origin items.

Violators of US export control regulations can face steep civil and criminal penalties. Under the ITAR, civil penalties can amount to \$1,111,908 per violation, in addition to other punitive or remedial measures. Under the EAR, civil penalties can reach the greater of \$250,000 per violation or twice the amount of the transaction that is the basis of a violation. Additionally, the US states may assess criminal penalties that can reach up to \$1,000,000 and 20 years' imprisonment per violation.

The interplay of these two sets of regulations with regard to the space industry has been the subject of significant political and public scrutiny over the past 25 years following revelations in the late 1990s that sensitive satellite and launch vehicle technology was transferred without authorisation from the US to the PRC. These issues resulted in a major upheaval and restructuring of US export controls involving the space industry. The discussion of the ITAR and EAR below is followed by a review of the impact of those events on US export control regulations over the past two decades.

(b) The Arms Export Control Act and the ITAR

The underlying statutory basis for the ITAR comes from the Arms Export Control Act of 1976 (1976 Act). The 1976 Act provides the President with statutory authority for the control of 'defense articles' and 'defense services', including related 'technical data'. The 1976 Act sets out foreign and national policy objectives for international defence co-operation and military export controls. The US Department of State implements the 1976 Act through the ITAR, which sets out the licensing policy and rules for exports of defence articles and defence services identified in the US Munitions List (USML). The USML comprises 21 categories, each relating to a specific class of controlled commodities. In general, a particular article or service not currently on the USML may be designated a 'defense article' or 'defense service' if it provides a critical military or intelligence advantage such that control is necessary. Importantly, the intended use of the article or service after its export (i.e., for a military or civilian purpose) is not, by itself, a factor in determining whether the article or service is subject to the ITAR.

USML categories IV and XV are most relevant to the space community. These two categories control space launch vehicles and certain spacecraft respectively, including many associated sub-systems, components, equipment and technical data of launch vehicles and spacecraft. Other USML categories can also have applicability to the space community, such as Category XI, which controls a variety of electronics capabilities, and Category V, which controls certain materials and substances, including propellants. As part of the export compliance process, exporters must determine how their commodities and technology are classified on the USML.

All items on the USML require authorisation prior to being exported, re-exported (ie, moving from one third country to another), re-transferred (i.e., moving from one end-user to another

within the same country), or shared with a non-US person. Authorisation to export commodities on the USML comes in the form of express approval by the DDTC of an ITAR agreement or licence, or through the use of an approved exemption.

(c) The Export Administration Act and the Export Administration Regulations

The Export Administration Act of 1979 (1979 Act) provides underlying statutory authority for most other US export controls. This act technically expired in 2001, but the President continues to implement the export licensing system created under it by invoking the International Emergency Economic Powers Act (IEEPA). Through these authorities, the President has the power to control exports for a variety of reasons, including national security and foreign policy purposes.

The US Department of Commerce implements the 1979 Act through the EAR, which sets out licensing policy for commercial and dual-use goods and technology and identifies controlled items using the Commerce Control List (CCL). The CCL contains the list of specific commodities, technologies and software that are controlled by the EAR and also identifies the specific reason for control of each item or technology on the list (eg, national security, regional stability and missile technology). CCL Category 9 is most relevant to the space community because it includes a variety of spacecraft and related components that have recently moved from the USML to the CCL. At the same time, the CCL as a whole is broadly applicable to the space community, particularly with regard to telecommunications applications and for manufacturers or suppliers of spacecraft components in general.

Unlike the ITAR, the EAR does not require export authorisation for all items on the CCL. Rather, the EAR requires an examination of a particular CCL item at issue, its reason for control, the country of destination, the intended end-use of the item and its intended end-user. Based on each of these factors, the exporter must determine whether export restrictions apply. Certain exports may not require any export authorisation, some may require an export licence and others may be eligible for certain licence exceptions.

(d) Case studies and significant developments

HSC and SS/L case study and the 1999 transition of commercial communications satellites to the ITAR: During the 1990s, the PRC was an active launch provider of US-manufactured communications satellites. From 1990 to 1999, the state-owned China Great Wall Industry Corporation (CGWIC) successfully marketed China's Long March rockets for a total of 19 international missions involving US contractors. To utilise Chinese launch services during this time period, US satellite manufacturers had to secure specific export licences from US authorities for the export of their satellites to the PRC, as well as for the export of technical data in support of these satellite launches. Notably, the US prohibited the export of any technical assistance that could help the PRC design, develop or enhance its launch vehicles or launch facilities. This prohibition on technical assistance generally extended to technical

discussions with Chinese counterparts relating to launch failures, unless separately authorised.

Despite the specific restrictions on exporting technical assistance to the PRC, which often appeared as express provisos in US export licences, two US satellite manufacturers participated in *Long March* failure investigations. Specifically, Hughes Space and Communications Inc (HSC) participated with the PRC in two failure investigations following the loss of its *Optus B2* and *Apstar II* satellites in 1992 and 1995 respectively. Additionally, Space Systems/Loral Inc (SS/L) participated with the PRC in a failure investigation following the loss of its *Intelsat 708* satellite in 1996, with HSC volunteering its experience for this investigation as well.

These events spurred immense political scrutiny within the US, due to their connection to a much broader investigation of the PRC's alleged campaign of espionage and theft of missile, space, and thermonuclear weapons technologies from the US. The broader investigation culminated in the voluminous 1999 Cox Commission Report by the US Congress. Moreover, HSC and SS/L faced civil settlements in amounts of \$32,000,000 and \$20,000,000 respectively in respect of administrative charges of export violations brought by the US Department of State. The settlements also required multi-year, comprehensive remedial measures by the two companies at the direction of an official compliance monitor.

The HSC and SS/L cases caused a complete shift in the US export control regime for communications satellites. In 1999, US-origin commercial communications satellites returned to the more restrictive jurisdiction of the US Department of State under the ITAR, following a period of control under the less restrictive jurisdiction of the US Department of Commerce. This policy reversal meant that the United States was the only country treating satellites as munitions for export control purposes.

Export control reform and the 2014 return of commercial communications satellites to the EAR: Following the transition of commercial communications satellites to the ITAR, the US saw its share of global satellite manufacturing decrease by over 20%, due in part to the rise of 'ITAR-free' international market offerings. The language of the ITAR led to ambiguities in interpretation and inconsistencies in application with various sectors. The uncertainty led to business impediments that became more pronounced as technology advanced, and customer bases and supply chains globalised, over the past twenty years.

A now infamous ITAR anecdote from the era following the HSC and SS/L cases involves a metal stand used to support *Genesis I*, the experimental space habitat designed and manufactured by Bigelow Aerospace (Bigelow). As a former Bigelow representative wrote:

If the Genesis I stand were placed upside down, covered with a nice checkered tablecloth, and you put a couple of plates on it, one would be hard pressed to distinguish the stand from any other table already commonly available at Moscow's local IKEA outlet. Yet, because the stand had been designed for Genesis I (an ITAR-controlled spacecraft) the stand also fell under ITAR control. Accordingly, the US required Bigelow to keep the stand under watch at all times as a condition of its export to Russia in preparation for the Genesis I launch. It took

Bigelow several months and considerable resources to receive and clarify fully the scope of a waiver to lift this restrictive proviso.

In 2009, President Obama announced the launch of a comprehensive review of the US export control system, known as the Export Control Reform Initiative (ECR), to bring additional clarity to export regulations and streamline the US export process. The four primary goals of ECR were described as:

- transitioning the US export control regime to a single licensing agency;
- establishing a single control list;
- creating a single enforcement structure; and
- implementing a single information technology (IT) system.

In recent years, the preliminary phases of ECR have resulted in certain items from the USML moving to the CCL; that is, certain items previously controlled under the ITAR are now controlled under the EAR.

Effectuating ECR for the satellite sector required specific action from the US Congress. By contrast with all other ITAR-controlled items, the President did not have statutory authority to move satellites and related items to the less restrictive EAR without a new mandate from Congress, due to the previous statutory requirements that emerged from the HSC and SS/L cases in 1999. It took over a decade of advocacy efforts by the US space industrial base to secure the necessary legislative authorisation. In 2010, Congress called for the secretaries of Defense and State to carry out an assessment of the risks associated with removing satellites and related items from the USML. This assessment (referred to as the 'Section 1248 Report' because it arose out of section 1248 of the National Defense Authorization Act 2010) was publicly released in April 2012 and concluded that certain communications satellites and remote sensing satellites with lower performance parameters were more appropriately controlled as dual-use items under the EAR. These findings laid the groundwork for extending ECR efforts to the satellite sector. One year later, through section 1261 of the National Defense Authorization Act for Fiscal Year 2013, Congress effectively returned to the President the authority to determine which export control framework would govern satellites and related items.

Consistent with the findings of the Section 1248 Report, ECR has resulted in the transfer of most commercial communications satellites, lower-performance remote sensing satellites, as well as planetary rovers and planetary and interplanetary probes, from the USML to the CCL. Certain satellites and sub-systems with higher level performance capabilities, such as spacecraft with autonomous tracking capabilities, remain on the USML, as do human-rated spacecraft with integrated propulsion other than that required for attitude control. The ban on US satellite exports to the PRC remains in place.

Recent NASA case study: Despite the progress in US export control policy for the space community, adherence to US export regulations remains one of the most complex and challenging endeavours for the community in international trade law compliance. The

regulations remain highly technical, detailed and lengthy. These risks exist for both the commercial and civil sectors alike.

Government agencies are not immune: recent investigations into the export policies and practices of the National Aeronautics and Space Administration (NASA) have reinforced the imperative of export compliance for the space community. Specifically, two incidents from 2009 and 2013 triggered comprehensive investigations into NASA's export control programme and related policies. As reported by the NASA Office of Inspector General (OIG), US law enforcement agencies received complaints, beginning in 2009, that foreign nationals working as contractors at NASA's Ames Research Center had been given improper access to export-controlled information. Additionally, the OIG reported that questions arose in 2013 regarding a Chinese national's access to NASA data and IT systems at the Langley Research Center. These events led to investigations and reports by the OIG, the US Government Accountability Office (GAO) and the National Academy of Public Administration (NAPA).

Investigators concluded that weaknesses in NASA's implementation of export control, foreign national access, and scientific and technical information procedures had created export control vulnerabilities at some NASA centres. The reports indicated that some NASA centres did not comply with policies on foreign national access to NASA technologies and that some centres did not adhere to NASA procedures for export reviews of scientific and technical papers prior to public release. Moreover, the GAO highlighted that NASA lacked a comprehensive inventory of export-controlled technologies and that its headquarters had not fully utilised oversight tools with regard to export compliance at NASA centres. These reports and findings collectively led to 40 recommendations to improve NASA's export control and foreign national access processes and procedures.

Importantly, since NASA is a civil agency, this case was not managed directly by US export control regulatory authorities. Rather, it was handled as a matter of government oversight by the OIG, the GAO, and the NAPA. Had this fact pattern revolved around a commercial entity, it would likely have resulted in significant monetary penalties and remediation requirements. In short, the lessons learned from the NASA investigation are broadly applicable to anyone in the space community who is subject to US export controls.

European Union export controls

Within the European Union (EU), export controls are set at EU level and implemented at national level. Council Regulation 428/2009 of 5 May 2009 sets forth the regime for dual-use items. Council Common Position 2008/944/CFSP of 8 December 2008 defines common rules for military items. Member States take different approaches to the implementation of these general frameworks, with notable variance in the dual-use regulatory context. For example, export registration, reporting, and compliance requirements differ among EU Member States.

Member States adopt varying interpretations of EU control list entries. As evidenced in a recent Information Note on Member State conformity with Regulation 428/2009, no Member

State implements all of the provisions of the regulation. Moreover, some Member States facilitate export activity through broad national authorisations, while others do not.

In short, there is no one single, harmonised EU export control regime. Rather, Member States have significant discretion when implementing EU frameworks. This creates an environment in which exporters should not expect uniform treatment even if exporting the same item from different EU Member States.

Despite differences to be expected at the national level, the EU frameworks have many commonalities with the multilateral and US regimes. The EU control lists for dual-use and military items conform to the multilateral export control regimes. Furthermore, the EU frameworks extend to intangible transfers of technology, much like the US export control regime. Similarly, whether an authorisation is required for any particular export generally depends on the export classification of the item or service, the destination, the end-user and the end-use.

i. Regulation 428/2009 (dual-use items)

Among other things, Regulation 428/2009 sets forth the EU dual-use item control list, the conditions for controlling non-listed items, the types of export authorisation that can be issued by Member States and requirements for intra-EU transfers of dual use items.

Annex I of Regulation 428/2009 contains the list of controlled dual-use items. Notably, Annex I takes a form and structure similar to the List of Dual-Use Goods and Technologies from the Wassenaar Arrangement and the Commerce Control List of the United States. The annex represents consolidated versions of the control lists from the four multilateral regimes. Items controlled in Annex I cannot be exported outside the EU customs territory without an export authorisation. All items included in Annex I can be exported within the EU without authorisation, except those items included in Annex IV (eg, MTCR-controlled technologies) and any items subject to special national controls. Export authorisations within the EU may take the form of EU-wide General Export Authorisations (GEAs), State-specific National General Export Authorisations (NGEAs), and case-by-case global or individual exporter specific authorisations.

Regulation 428/2009 provides four specific exemptions from the higher level controls placed on items cross-referenced in Annex IV.In particular, space launch vehicles, propulsion systems and related MTCR-controlled technologies are exempt from Annex IV controls where they are transferred under any of the following conditions:

- on the basis of orders pursuant to a contractual relationship placed by the European Space Agency (ESA) or by ESA to accomplish its official tasks;
- on the basis of orders pursuant to a contractual relationship placed by a Member State's national space agency or by such agency to accomplish its official tasks;
- on the basis of orders pursuant to a contractual relationship placed in connection with an EU space launch development and production programme signed by two or more European governments; or

• to a State-controlled space launching site in the territory of an EU Member State, unless that Member State controls such transfers within the terms of Regulation 428/2009.

ii. Common Position 2008/944/CFSP (military items)

By contrast with the US export control regime, the EU's export control frameworks expressly differentiate between and delineate military and dual-use items. Whereas Regulation 428/2009 covers dual-use items, EU Common Position 2008/944/CFSP governs military arms exports and related transparency measures. This framework is relevant to the space community because it applies to rockets specially designed for military use, spacecraft specially designed or modified for military use, and spacecraft components specially designed for military use. The Common Military List of the EU is the control list that identifies items subject to Common Position 2008/944/CFSP, including these space-related military items. Besides having to implement the EU Common Military List into national legislation, EU Member States are also permitted to add items to their national military lists.

All EU Member States have agreed to adhere to Common Position 2008/944/CFSP, and the EU Council has issued a *User's Guide* to it to help Member States and practitioners apply the governing framework. The Common Position identifies eight criteria for the export of items on the Common Military List, including:

- respect for international obligations and commitments of Member States;
- respect for human rights in the country of final destination as well as respect by that country for international humanitarian law;
- the internal situation in the country of final destination;
- preservation of regional peace, security and stability;
- the security of Member States and associated territories and friendly or allied countries;
- the behaviour of the buyer country with regard to the international community (eg, with regard to its stance on terrorism, the nature of its alliances, and respect for international law);
- the existence of a risk that the military technology or equipment will be diverted; and
- compatibility of the exports with the technical and economic capacity of the recipient country.

SANCTIONS AND RESTRICTED PARTIES

Sanctions are regulations intended to compel changes in the policies of targeted countries or mitigate the actions of targeted persons. Among other purposes, governments use sanctions as a foreign policy tool to exact compliance with international security or human rights norms, secure peace, condemn atrocities, prevent the proliferation of weapons of mass destruction or combat terrorism and other violations of international law. With regard to the conduct of outer space activities, sanctions may prohibit market access to targeted countries, prevent the export of space-related technologies to designated entities, restrict information sharing and international co-operation or indirectly affect supply chains.

Sanctions take many forms, including travel bans, asset freezes, embargoes, mandatory denials of export licences, or tailored prohibitions on transactions or other interactions with sanctioned entities. These types of measure may target a specific country, activity or person. In many jurisdictions, sanctions are maintained in part using restricted party lists, which designate specific persons who are subject to a sanctions programme at any given time. Sanctions and restricted party lists often overlap with export control regulations to the extent that sanctions against a restricted party include specific export licensing requirements or export prohibitions.

For practitioners, sanctions compliance requires due diligence (eg, third party screening and 'know-your-customer' best practices) to ensure that transactions do not involve prohibited persons or activities. Practitioners may also need to obtain authorisations or waivers for activities that would otherwise be prohibited by sanctions. Because sanctions are fundamentally a foreign policy mechanism, and tend to change dynamically based on specific political events, practitioners must also keep attuned to the political factors driving relevant sanctions programmes and maintain a strong advocacy position with the relevant authorities.

The United Nations framework

The United Nations (UN) Security Council establishes international sanctions for purposes such as non-proliferation, counter-terrorism, conflict resolution and protection of human rights. The Security Council may impose sanctions by resolution pursuant to Chapter VII of the UN Charter, and UN member States are responsible for compliance and enforcement. Typically, UN sanctions take the form of asset freezes, arms embargoes, travel bans, severance of diplomatic relations or commodity interdictions. UN sanctions programmes are administered by Security Council Sanctions Committees, which co-ordinate the listing and delisting of targeted entities, manage exemptions, and monitor and report on each programme. Currently, the Security Council maintains thirteen active sanctions regimes and identifies sanctioned persons using the Consolidated United Nations Security Council Sanctions List.

The US framework

US sanctions laws and restricted parties lists are administered by the US Department of Treasury's Office of Foreign Assets Control (OFAC), the US Department of State and the US Department of Commerce. With regard to sanctions, the US generally utilises two different approaches:

- · list-based sanctions, and
- country-based sanctions.

List-based sanctions target specific individuals and entities. They generally prohibit US persons and, in some cases, non-US persons from engaging in certain transactions with listed parties. For example, the Specially Designated National (SDN) List is OFAC's primary restricted party list. US persons are prohibited from engaging in transactions with SDNs and must block or freeze SDN property interests. In addition, the Foreign Sanctions Evaders List

identifies, among other things, non US persons who have facilitated deceptive transactions for or on behalf of persons subject to US sanctions.

Country-based sanctions, on the other hand, are broader, comprehensive sanctions that the OFAC administers against a varying and dynamic list of countries that has included Cuba, Iran, and Syria (among others) in recent years.

US sanctions laws also impose restrictions on transactions that may occur primarily between non-US persons. For example, a non-US company may be subject to US penalties if it knowingly causes, aids, abets or conspires with a US person to violate an OFAC sanctions programme. Indeed, the US government has aggressively prosecuted non-US companies for causing violations of these laws in recent years. Moreover, violations of sanctions or engagement with restricted parties can lead to non-US persons being identified on restricted party lists.

The Entity List maintained by the US Department of Commerce is another restricted party list that comes from the export control domain. This list includes the names of certain non-US persons (businesses, research centres, public and private organisations, individuals, etc) that are subject to specific export licence requirements on the basis of the national security and/or foreign policy considerations associated with an entity's designation on the Entity List. The Department of Commerce reviews export licence applications that include listed entities according to an entity's role in the proposed transaction and the specific licence review policies set forth for the particular listed entity. Additionally, the Department of Commerce maintains the Unverified List for parties who are ineligible to receive items subject to the EAR by means of a licence exception and the Denied Persons List for parties who are entirely ineligible to receive items subject to the EAR.

The EU framework

The EU applies economic sanctions to further specific objectives of the EU Common Foreign and Security Policy (CFSP), which include preserving peace, strengthening the security of the EU and international security, and developing democracy, the rule of law, respect for human rights and fundamental freedoms. EU restrictive measures require unanimous consent of Member States to take effect. Once passed by the EU Council and published in the *Official Journal of the European Union*, regulations are directly binding on Member States. Each Member State is then individually responsible for determining the penalties it will impose for violations of EU sanctions, for granting exemptions, and for receiving information from and co operating with financial institutions. EU Member States may also impose their own additional restrictions at the national level, over and above EU sanctions.

EU sanctions have consistently been issued as targeted restrictive measures and, in similar fashion to the US, often take the form of financial restrictive measures, including asset blocking/freezing requirements. The EU Consolidated List of Persons, Groups and Entities subject to EU Financial Sanctions (EU Consolidated List) identifies the entities and individuals that are subject to financial sanction provisions under any given sanctions programme. EU restrictive measures are generally binding on any person or entity physically

present within the European Union, any entity incorporated under the law of an EU Member State, any national of an EU Member State (irrespective of his or her location), and in respect of any business activities done in whole or in part in the EU.

Sanctions and the space industry

i. US sanctions against China and the China Great Wall Industrial Corporation
In the aftermath of the deadly Tiananmen Square protests of 1989, the US
imposed economic and diplomatic sanctions against the PRC. These so-called
'Tiananmen Square sanctions' included, among other provisions, a suspension of
export licences for US-manufactured satellites contracted to be launched in
China. However, the sanctions also included a savings clause, brought about in
part through effective satellite industry lobbying, which allowed the President to
issue waivers of the export prohibition on the basis of either of two conditions: a
favourable report by the President to Congress on China's political and human
rights reform, or a determination by the President that issuance of an export
licence would be in the national interest. Throughout 1998, the US issued 12
national interest waivers to allow satellite launches to continue from China.

Separately, in 1991, the US issued targeted sanctions against Chinese entities involved in the transfer of missile technology to Pakistan. These sanctions, administered by OFAC through its list-based regime, prohibited certain transactions with China's *Long March* launch provider, China Great Wall Industrial Corporation (CGWIC). The sanctions remained in effect for less than a year, as the PRC took action to mitigate the sanctions by agreeing to adhere to the MTCR Guidelines and MTCR Annex. Yet, similar sanctions took effect again in 1993 against CGWIC following another Chinese sale of missile technology to Pakistan. This round of sanctions affected seven planned launches of US commercial communications satellites in the PRC. Again, the US lifted the sanctions just over a year later in 1994, having received renewed commitments from China that it would not export certain missile technology. A similar pattern of US sanctions against CGWIC recurred in 2004 and 2008, following instances of Chinese technology transfers to Iran in contravention of US non-proliferation policies, with each instance seeing the addition and subsequent removal of CGWIC from OFAC's SDN List.

ii. India's space sector on the US Entity List

In 1998, the US issued economic sanctions against India and Pakistan following the two countries' respective nuclear tests. Among a wide array of measures, the sanctions banned the export of certain items and technology to India and Pakistan and imposed a licensing policy of denial for exports of items controlled for nuclear non-proliferation and missile technology reasons. Moreover, the US Department of Commerce added several hundred governmental and private persons involved in nuclear or missile activities in India and Pakistan to the Entity List in order to supplement the sanctions. While the large bulk of sanctions against India and Pakistan were lifted in 2001, due in part to the co-operation of Pakistan following the 11 September, 2001 attacks on the US, the Entity List designations remained in effect.

Importantly, the Entity List designations extended to a large section of India's defence and space sector. Among others, the US added the following to the Entity List: Bharat Dynamics Ltd (BDL), a missile technology manufacturer; a number of subordinate entities of India's Defence Research and Development Organization (DRDO); and the Indian Space Research Organization (ISRO), including the Liquid Propulsion Systems Center, Solid Propellant Space Booster Plant, Sriharikota Space Center, and Vikram Sarabhai Space Center (VSSC).

Between 2002 and 2006, a US company, Cirrus Electronics LLC (Cirrus), with offices in the US, Singapore, and India, engaged in exports of US microprocessors and electronic components for space launch vehicles and ballistic missile programmes to India's VSCC and BDL without the required licences. Cirrus, through its president and others, provided its vendors with fraudulent end-use certificates and routed the exports through Cirrus's Singapore office to conceal the ultimate destination of the goods. Following investigations by the US Department of Commerce, in co ordination with the Federal Bureau of Investigation (FBI), Cirrus's president was sentenced to 35 months in prison, two years of supervised release, and a \$60,000 criminal fine. The company also lost all of its export privileges for over a year.

The US has since removed India's defence and space sector entities from the Entity List. The de-listing occurred in 2010, following the a joint announcement by the US and India of their global strategic partnership, which included steps to transform bilateral export control regulations and policies and an expansion of US India co-operation in civil space, defence and other high-technology sectors.

iii. Contemporary US and EU sanctions against Russia

More recently, the US and EU initiated sanctions against Russia in 2014 following its military intervention in Ukraine. While broadly co-ordinated by the US and EU for purposes of international security, the new sanctions programmes raised particular concerns within the space community, due to Russia's predominant role as an international supplier of launch services, commodities and technologies. Advocacy efforts within the EU space community led the EU Council to amend its sanctions against Russia to make clear that the restrictive measures should not affect the European space industry. In particular, launch operations requiring items on the EU's Common Military List were exempted from the restrictive measures to ensure that Europe's space agencies and commercial industry would not be negatively affected by the new sanctions regime against Russia.

The US reached a similar conclusion on its sanctions against Russia in 2014, but with more political wrangling. In particular, certain US sanctions against two Russian officials became a conspicuous political issue when Space Exploration Technologies Corp (SpaceX) questioned whether its rival and fellow US launch provider, United Launch Alliance (ULA), could continue to purchase RD-180 engines from Russia. The two sanctioned officials, Dmitry Rogozin (Russia's Deputy Prime Minister) and Sergei Chemezov (CEO of Rostec Corporation), held board memberships with the Roscosmos State Corporation (Roscosmos), the governing body of the Russian space industry. Through their director-level positions with

Roscosmos, Rogozin and Chemezov were indirectly affiliated with subsidiary NPO Energomash, the Russian manufacturer of the RD-180 and other engines marketed globally.

As argued by SpaceX and its allies, including Senator John McCain, ULA's purchases of RD-180 engines indirectly benefited Rogozin and Chemezov. However, in determining whether certain interests held by sanctioned persons may be subject to US blocking orders, the US Treasury Department (through OFAC) generally applies a so-called '50 percent rule': any entity owned 50% or more in aggregate, directly or indirectly, by one or more blocked persons, is itself considered to be a blocked person. By application of this rule, the Treasury Department effectively determined that the indirect interests of Rogozin and Chemezov did not render NPO Energomash or Roscosmos sanctioned parties, meaning that RD-180 purchases did not constitute a violation of US sanctions laws. Although Senator McCain continued to press US authorities for evidence or certification that no benefit accrued to sanctioned Russian parties from purchases of the engines, the outcome ultimately shaped a provisional legislative compromise to the issue in June 2016, resulting in limits on RD-180 purchases but not barring such purchases outright.

IMPORT CONTROLS AND CUSTOMS-RELATED TRADE ISSUES

A chapter on international trade would be incomplete without mention of import controls and the broader context in which governments manage particular customs related trade issues. The following sections provide select highlights of such areas of trade practice as are relevant to the space community.

Import controls

Import controls restrict the import of goods or services into a given jurisdiction or customs territory. They take the form of tariffs or duties, as well as non-tariff measures such as licensing requirements, quotas, subsidies, currency restrictions or prohibitions and embargoes. While export controls tend to dominate the attention of trade practitioners within the space community, import controls and related areas of customs law provide the fulcrum on which international trade occurs. Many companies often overlook the fundamental importance of accurate tariff classification and appraisement as sources of potential duty savings and necessary compliance for imported products. To maintain a competitive edge, practitioners must keep alert to the numerous preferential trade and tariff programmes available to importers. These are the 'nuts and bolts' of any sophisticated customs and import controls practice.

Although governments set import controls through a multitude of policy and regulatory mechanisms, including through unilateral, bilateral and multilateral approaches, the World Trade Organization (WTO) is the most common clearing house for the negotiation of trade agreements and the establishment of tariffs and non-tariff measures. The WTO came into force in 1995 as the successor to the post World War II General Agreement on Tariffs and Trade (GATT). Today, the WTO framework spans a multitude of agreements that set the trade rules for member countries' trade in goods, services and intellectual property (IP).

The significance of WTO processes to the space sector comes to light through the way in which trade agreements impact market access, reduce technical barriers to trade, establish import licensing and customs requirements, and provide for trade related investment measures, all of which impact upon global supply chains and the movement of goods. For example, 53 participants to the multilateral Information Technology Agreement (ITA) agreed in December 2015 to expand the products covered under the ITA's zero-tariff policy – namely, to include telecommunications satellites and many related components, such as next generation semiconductors, navigation systems and optical lenses, among others. As participating States implement duty-free treatment for these items, the WTO anticipates benefits across the telecommunications industry, including monetary savings for IT companies, greater market access and predictability for traders and lower costs to consumers.

Trade remedies and disputes

Trade remedies are a common variation of standard import controls. Trade remedies include anti-dumping actions, countervailing duty measures and safeguard actions. Governments use each of these remedies when prevailed upon to do so by a domestic industry that has suffered material injury due to the trade practices of a foreign country or exporter. Specifically:

- anti-dumping actions are measures, often in the form of duties, taken to counteract the effects of an exporter who 'dumps' goods into a foreign market at prices below the domestic market value in the exporter's country;
- countervailing duties counteract the effects of another country's domestic subsidies; and
- safeguard actions are 'emergency' protective measures invoked when a sudden increase in imports significantly threatens domestic industry.

The conditions under which governments may utilise these types of remedy are largely regulated through particular WTO agreements, with varying national regulations detailing the procedures for the initiation of such remedies.

The WTO also serves as a common forum for the resolution of trade disputes, which may encompass remedies cases in addition to a broad range of other topics, including trade in goods, IP and government procurement. Under the terms of the Understanding on Rules and Procedures Governing the Settlement of Disputes (the Dispute Settlement Understanding or DSU), which is Annex 2 to the WTO Agreement, WTO dispute settlement may include any number of four major phases:

- State-to-State consultations;
- panel hearings;
- · appeals; and
- implementation of any recommendations of the panel or Appellate Body.

Importantly, dispute resolution through the WTO is a State-based process; non State entities (eg, companies and trade associations) are not direct parties to any WTO dispute procedures but, in most instances, are practically represented through their State officials.

To date, only one case resolved through the WTO process has directly related to the space sector, though other cases have had tangential impact. In April 1997, the EU initiated consultations with Japan through the WTO process, contending that a procurement tender published by the Japanese Ministry of Transport for a multi functional navigation satellite was not neutral but referred explicitly to US specifications, rendering European bidders unable to participate in the tender. The EU alleged that Japan's tender violated provisions of the plurilateral Agreement on Government Procurement (GPA). Japan and the EU resolved the issue through the consultation process by establishing a co-operative framework for interoperability between European and Japanese global navigation services that would allow the EU to compete in future tenders.

INTERNATIONAL AGREEMENTS

Underlying nearly all international activities relating to outer space are bilateral or multilateral agreements, which establish frameworks and terms for international space cooperation and, importantly, address specific issues to space-related trade. For example, a 1988 Memorandum of Agreement between the US and the PRC paved the way for Chinese launches of US commercial communications satellites during the 1990s. The US conditioned its authorisation of satellite exports to China upon two requirements particular to trade concerns:

- the two countries had to reach agreement on technology transfer safeguards; and
- China had to take steps to protect the US launch industry from anti competitive pricing in the future.

In a related example, India and the US have recently been at a crossroads over the signing of a bilateral agreement known as the Commercial Space Launch Agreement (CSLA). The proposed US-India CSLA includes similar safeguards to prevent anti-competitive pricing by India of US commercial satellite launches on India's Polar Satellite Launch Vehicle (PSLV). The two countries have yet to reach an accord, however. In the interim, the US has instituted an informal ban on the export of US satellite payloads to India, requiring US companies to solicit waivers from the departments of State or Commerce prior to proceeding with any launch arrangements with India. Since 2015, at least five US satellite companies have obtained waivers allowing them to launch their satellites aboard the PSLV. These and other satellite producers have lobbied the US Trade Representative to change this policy, while US launch companies, seeking to maintain their competitive advantage, have campaigned to maintain the protective measures.

In many instances, like those above, the nexus between trade and outer space activities is readily apparent as the central policy issue. In other instances, trade related provisions are embedded within broader programme- or mission-specific cooperation agreements. For example, articles 18 and 19 of the International Space Station Intergovernmental Agreement (IGA) address 'Customs and Immigration' and 'Exchange of Data and Goods' respectively. Article 18(3) stipulates:

Each Partner State shall grant permission for duty-free importation and exportation to and from its territory of goods and software which are necessary for implementation of this Agreement and shall ensure their exemption from any other taxes and duties collected by the customs authorities.

Moreover, article 19 establishes a framework for the exchange of technology and goods in consideration of the export control requirements of each participating State. The details that follow these framework provisions are often provided for in implementing agreements or other memoranda of understanding between participating States.

As demonstrated by these examples, international agreements often stipulate or supplement the conditions under which trade can occur between international partners in space-related projects. They signal to industry that the respective signatory governments are opening avenues for trade and technology transfer between the participating countries, while possibly securing assurances for domestic industry at the same time.

WTO AND SPACE ACTIVITIES

Trade-related aspects of space activities and technologies, i.e. satellites are relevant to the multilateral trading system from several perspectives: trade in goods, as regulated in the GATT Agreement and the Agreement on Technical barriers to trade (TBT), intellectual property rights (TRIPS), public procurement (GPA) and, most importantly, trade in services (GATS). In the first section of this work, a descriptive part will introduce WTO rules which can have an impact on space activities in order to raise the perception of the existing interfaces.

The WTO, after its creation in 1995 and the extension of its mandate to services and IPRs, represents a key element in the governance of the global economy. It is clearly not intended to raise a discussion on globalization and global governance here, but rather t warn from the start against two current misperceptions of the WTO role: discarding it as a mere and sectoral tool of mercantile interests on one side or, on the other, overburdening it as the centre-piece of the international economic system, thereby becoming the source of all the good or the evils of the world.

A realistic and well-balanced approach should assign to the WTO the basic role of regulating international trade, including the regulatory measures which affect trade; which is no substitute for the other international, regional or national policies that are aimed at promoting or preserving other fundamental public goods such as social equity, the environment, health or, the peaceful use of outer space. In truth, the question of regulating markets is a highly sensitive and political and promoting growth through liberalization is not an entirely neutral policy option. In fact it is only by integrating the concerns of the developing countries that the necessary international consensus can be reached and not only in the trade area. At the same time, due account must be taken of the widespread concerns on the impact of globalization, mainly in industrialized countries. The balance between these two elements-promotion of integration of developing countries and the response to the backlash of globalization- will be the key political factor in the next round of liberalization.

The role of ESA discusses the long disputed question of multilateralism versus regionalism. The so-called primacy of the multilateral system is an important principle but not an "articulum fidei". From a more pragmatic point of view, regionalism can and should be seen as a milder and gradual way to achieve global liberalisation in parallel with the multilateral approach, as well as being an opportunity also for developing countries to coordinate efforts and resources with the aim of better competing in the world economy. The Uruguay Round introduced this more pragmatic approach in adopting Article V of the Agreement on Trade in services, which is certainly more flexible than the old general exception of Art XXIV of GATT. In fact there are still tensions, also within the technological field, mainly if not only in the transatlantic relationship. However, the EU as a single unit in the international economy these tensions must not be viewed anymore along the pattern multilateralism/regionalism but rather as a classic case of bilateral disputes. The real problem remains the interface between systems: international organisations, regional bodies, national governments. Interoperability of systems is the very proof, also from a legal point of view, of effective and coherent international cooperation.

It must be added that WTO is a multilateral organisation although not yet an universal one. China, Russia and the former Soviet countries and several middle East countries are negotiating their accession to the WTO. It is against this general background, which can be quite controversial, that the relevance of the WTO's role in space activities and regulations should be assessed. This assessment must be dynamic in nature, to capture the sense of the foreseeable evolution in view of the round of multilateral trade negotiations starting next year, together with the daily operations of the WTO concerning the implementation of commitments and the settlement of international disputes, if arising. It should be noted that these three main functions of WTO negotiation, verification of implementation, dispute settlement and notably the last one underscore a remarkable performance of the system itself.

GATT and Trade in Goods: Information Technology (ITA) and standard setting

In December 1996 at the first WTO Ministerial Conference an agreement on trade of information technology products (ITA) was concluded among a large number of WTO members representing 91% of the world IT market. The Agreement's objective is to eliminate customs duties on a large number of IT products in the year 2000 for the developed countries and 2005 for the developing ones. A second stage of trade liberalization in IT products aimed at enlarging the range of products (ITA 2) is currently under negotiation, with some delay mainly due to diverging negotiating strategies of the US and Europe and to the resistance of a few Asian States. ITA 1 and ITA 2 cover physical goods, including some of direct interest to space activities. It is impossible on this occasion to analyse ITA's coverage product by product. Given the nature of network of IT technology, it appears more suitable to have the broadest possible spectrum of liberalization covering intermediate and final goods, infrastructure, satellites and cables, computers and traditional devices, so that the WTO principle of neutrality of technology can be preserved and different levels of economic development accommodated.

The positive assessment of IT liberalisation is based on an economic perspective. In fact, it is an example of business-led liberalisation, since the main input came from the business community; moreover is also in the general interest, since it reduces costs of production in the other sectors, increases consumers welfare and promotes diffusion of new technologies in the least advanced regions. In short, it is a clear case of what is called a win-win situation in international trade. To be more specific, it should be reminded that international trade has been growing in the last 50 years more than global output and that international trade in IT, goods and services, is increasing at a faster rate than in any other sector; it is therefore a key factor of global growth. At the same time, while in the domestic markets the service component of IT is significantly higher than the goods component, the same is not true in international trade, where 60% is represented by trade in goods, 27% by settlement payments in telecommunication and the resulting 13% by other services.

Yet there is a significant weak point in ITA: only with the start of negotiations on ITA2, WTO members have began to discuss non-tariff measures (NTM's). It is widely known that after the liberalisation process of the Uruguay Round non-tariff measures have become the most significant obstacle to trade: among them, the most important are the technical standards and regulations. Standards, which are voluntary, and regulations, which are mandatory are aimed at safeguarding such public values as safety, health, environment or quality. Of course, standards and regulation can also be used to segment markets, ensure rents and protect domestic producers. This is why the GATT, starting in the Seventies with the Tokyo Round, had to deal with this issue and an Agreement on Technical Barriers to Trade (TBT) was included in the WTO Agreements. It must be stressed that WTO is not a standardization body nor does it require that members have product standards; it is just intended to prevent them constituting unnecessary barriers to trade, as such and from a procedural point of view (conformity certification and testing), while ensuring a certain level of transparency.

The TBT Agreement does not take part in the dilemma between standard setting at national or international level, simply stating that the first must be based on the second, if any, given due account to the specific needs (geographical, climatic, etc) of countries. Standard setting at the international level remains therefore entirely in the responsibility of other international bodies, such as ITU, ISO or IEC. The TBT Agreement thus leaves room for different approaches in standard setting between the US and Europe and between these and the developing countries, the latter remaining as a matter of fact still hesitant towards international regulations which could limit their freedom in the global market. The same is true for standards in services. The GATS encourages the use of international standards, but leaves the task of developing them to other competent international organisation (GATS, Art. VI5). The TBT, like other WTO Agreements, is subject to review and therefore could be part of the next round of negotiation. Till now, despite its importance, there have been no important disputes between Members in this area; which is strikingly different from what happens in the agricultural sector with the parallel Agreement on Sanitary and Phytosanitary measures (SPS), as in the hormone-treated beef case.

GATS and Trade in Services: Telecommunication and Remote Sensing

The Agreement on trade in services is one of the main achievements of the Uruguay Round. Following an American initiative, supported by the main industrialized countries, the extension of the multilateral trading system was intended to reflect a new situation, where services were the main component of GDP in the OECD countries, liberalization and privatization were the driving force in many economies and increasing flows of private foreign investment were concentrated in the service area. The main element of what was later called globalization, the fragmentation and delocalization of the productive process, was in fact possible only through a more intensive use of service: transport, telecommunication, insurance etc. which required a stable and predictable legal environment. If the rationale for a multilateral frame regulating service was, and still is clear, the challenge of establishing a new set of rules in a completely new area whose main feature is the invisibility of international exchanges was a very demanding one. The creation of the Single European Market was another key element in GATS negotiations setting a pattern of rules which helped multilateral trade negotiations.

The final result was an agreement covering all the service sectors, with a large amount of flexibility (larger than the GATT) and of follow-up work, defining only a few basic principles, that is transparency, most favoured nation, market access and national treatment. At the same time the agreement is quite complex from an intellectual point of view. The difficulty inherent to the delivery of a service was solved with the identification of four modes of supply. The problem of binding market access commitments of members (the barriers to trade being regulations, not quantifiable tools as tariffs or quotas) was dealt with the introduction of schedules for each members. Furthermore, the three more important sectors (transport, telecommunication, finance) were left to further specific negotiations in the form of Annexes to the Agreement. On the whole it is to be recognized that there is a problem of lecture and that the agreement should be made more user friendly. But the very fact that between 1996 and 1998 it proved possible to reach an agreement first on telecommunication and then on finance shows that GATS is adequate for ruling in such difficult matters.

From the perspective of space activities, the Agreement on telecommunications concluded in February 1997 is the most relevant element in GATS regulations, although not exclusive. Until then the sector was regulated at the international level by the ITU, which in fact used to act as the meeting point of national monopolies and of their relations based on the system of accounting rates, this does not imply any criticism of an organisation still playing a very important role; it just means that economy and technological changes required new rules.

The points of disagreement which prevented the conclusion of a TLC agreement in 1995-1996 and led to the extension of negotiations until 1997 were quite important indeed, above all the system of accounting rates, but also universal service, foreign investment, interoperability. Actually an agreement was only possible in 1997 because the solution of the most difficult problems was postponed, as in the case of the accounting rates or excluded, as cable transmissions and broadcasting or treated separately as question of principle as

competition, interoperability and universal service. Notwithstanding these shortcomings the 1997 agreement is important if only as the base for a process of further liberalisation in a frame of new global riles. It defines a programme of market access liberalisation between 1998 and 2013 covering all the important players; it includes the satellite communication services, which was very likely the element which permitted the final compromise; it provides for the opening though at different levels to foreign investment; it creates a stand-still in the sense that no country can now forsake its obligations without compensating.

It is interesting to note that satellite services were not included in the GATS services classification list and were not negotiated as TLC services during the Uruguay Round. In the negotiations which led to the 1997 Agreement, WTO members decided to include satellite TLC services on the basis of the principle of technological neutrality, rather than as a distinct subsector. The GATS Agreement on TLC is technologically neutral in so far it covers services supplied by all means of technology. A commitment in one sector, for instance voice telephony, should be read as covering the supply of that service by all means, cable, radio and satellite, unless otherwise specified.

This approach seems to have favoured a higher degree of liberalization in satellite TLC services than a sector specific approach. It should be noted, however, that on the basis of technological neutrality many WTO members have liberalised satellite TLC services, even if this is not expressly stated in their list of specific commitments. This final balance convinced Governments and the business community to accept the deal, even if he level of commitments between regions is non-homogenous, the US and the EU being by far the most open. As underlines above the Agreement has to be seen as a first important step. The perspective for the forthcoming negotiation will be treated below. There should be awareness that the most difficult questions are of regulatory nature, therefore politically sensitive: adequate answers to them will be seen by many as preliminary to another phase of market liberalisation.

Other services related to satellite activities may be relevant to the GATS. Services are classified in the GATS in 11 sub-sectors following the IMF classification. A technical work to improve the classification issues and the related statistical problems is currently underway. With reference to space activities, apart from telecommunication, remote sensing or global positioning is another service which comes to mind in the present technological situation. Generally speaking, remote sensing or global positioning could be treated in conjunction with telecommunication or separately, therefore in the 'others' category to the GATS general rules, irrespective of what the possible uses are, transport, navigation, traffic, environment, civil security etc.

TRIPS and Intellectual Property Rights

The reasons for inserting IPR's in the multilateral trading system are partly similar to those above summarized for services: in a few words, the globalization process. But more specific reasons were perhaps more important, in first place the long-standing question of trade in counterfeited goods, which has been increasingly seen by the industrialized countries as an

unfair source of erosion of their competivity in the international market. The second main reason was related to the need of challenging the unilateralism of the US legislation in this area through the establishment of a multilateral frame. It is evident that the discussions on this items were highly controversial during the Uruguay Round, the main focus of contrast being North/South but not exclusively. The hard-liners among the developing countries accused IPR's rights to be protectionist tool to the richest countries set to limit the access to markets, to curb the diffusion of technologies and to increase the prices of certain goods, like food, pharmaceuticals and fertilisers badly needed in the poorest countries.

Other critical points of an institutional nature were raised. First, while the whole GATT system, services included, is built on the principle of negative obligation, the TRIPS negotiations were aimed, and succeeded, at establishing positive obligations setting common minimal standards of protection of IPR's rights as for instance, the 20 years minimum for patents. While this feature can and must be seen as a successful example of integration at the multilateral level, for others it was and still is perceived as a case of interference into the sovereign rights of States. Second, there is already an international body in charge of IPR's at the international level: the WIPO, of the UN family, with the mandate of administering the whole set of international Conventions in this area. So, why to supplicate its activities?

As a matter of fact the TRIPS Agreement was concluded, but it is worth remembering, notably in view of a new round of negotiation the series of question and objections that it raised and the political and institutional sensitivities it touched since they are still alive.

The TRIPS Agreement, like the WIPO, covers the entire range of Conventions on intellectual property, i.e. patents and trademarks (Paris Convention), copyright including computer software (Berne Convention), false origin (Madrid Agreement), appellation of origin (Lisbon Agreement), neighbouring rights, that is performance and phonograms (Rome Convention and Geneva Convention) and integrated circuits (IPIC Treaty, not yet into force). The only notable exception which is to be connected with the problem of bio-technologies. Compared to the WIPO rules, the TRIPS agreement has eliminated certain loopholes this responding to the demands of industries. However the most important added value of TRIPS is the possibility of activating the WTO dispute settlement procedure. Here lies the difference eith the WIPO. A WIPO dispute could be settled at the International Court of Justice, but only with the consent of all the parties concerned, whereas at the WTO there is no such a necessity and the crucial decisions, like panels and Appellate Body reports, are made in an automatic way through the negative consensus rule. Experience so far shows that intellectual property is, after agriculture and related problems, one of the more frequent users of the DSU>

With this background in mind, it has to be added that space technologies, including telecommunication, are fully covered by the TRIPS Agreement, at least to the extent that they are already subject to commitments in the relevant IPR agreements.

GPA and Government Procurement

Given the obvious relationship with trade, the GPA was already negotiated in the Seventies during the Tokyo Round. As a result of the Uruguay Round it is now formally integrated in

the WTO Agreements and its application extended from governments also to sub-national and public utilities tendering, including services and construction.

The GPA's main obligations are the introduction of national treatment, non-discrimination in purchase by government entities and more transparent detailed procedures for tendering. As a consequence the old principle of national preference is prohibited and selective procedures severely restricted. Given the high share of public procurement in the formation of GDP and its sectoral importance the impact of the GPA Agreement on the world's economy is quite large.

This impact is nevertheless limited by GPA's 'multilateral' nature: only 11 States, counting 1 the EEC, subscribed to it. rights and obligations deriving from it are restricted to them and the MFN clause does not apply.

GPA is, with the agreement on civil aviation, the only surviving example of GATT Multilateral agreements. The clear challenge is the enlargement of GPA membership, that is its multilateralization. But developing countries have always consistently and strongly rejected this proposal, considering it too engaging and detrimental to their interests of national development. The negotiating objective of the developed countries was therefore downgraded to the improvement at the multilateral level of tendering procedures. Since the first WTO Ministerial Conference in Singapore in December 1996 a working group was established to study the perspective of a better transparency in this field. This item could be pursued in the coming round of negotiations.

Till now space activities have been public in nature and mainly managed by Governments and Public Agencies. The WTO Agreement on Government procurement is therefore highly relevant for them, outlining the picture into which public tendering has to be fit.

Tendering in satellite technologies and services is mainly, if not exclusively, of interest to the most advanced economies. Since the WTO dispute settlement procedure (DSU) applies to the GPA, possible controversial issues between them could be submitted to WTO panels. It is worth noting that last year the European Communities started the DSU procedure against Japan for a tendering which gave preference to the US technology for a telecommunication satellite. The case was solved through bilateral and confidential consultations. There is no jurisprudence to be referred to in this field. However the very existence of DSU acted as an incentive to find a compromise and remove discrimination.

The Future Multilateral Trade Agenda

Since the Marrakesh Agreement much has been done to keep the momentum of trade liberalisation, notwithstanding a problematic environment both in political and economic terms: the backlash of globalisation and financial crisis. We are at present at a critical juncture. A short overview of the future trade agenda has to be presented from three perspectives: first, and most important the forthcoming round of trade negotiations; second, the negotiations for WTO accession involving more than 30 countries, among which large players, such as China, Russia and Saudi Arabia; third, the ongoing process of trade dispute

settlement. The impact od the trade agenda is relevant also to space activities as the rules will evolve, be extended to new players and interpreted in possible disputes. For new technologies with a major role in driving globalisation, this is all the more important.

The New Round of Negotiations: 'Millenium Round', 'Development Round' or 'Mini Round'?

The Agreements on agriculture and on services already provide for new negotiations starting in the year 2000. Other WTO Agreements are subject to general or specific reviews. The whole set of mandated negotiations or reviews is known as the built-in agenda. For a large number of WTO members the scope of the agenda should be enlarged. Since the initiatives taken at the 1996 Singapore Ministerial meeting working groups were created on investment, competition and procurement and it was agreed to improve the measures in favour of the least developed countries. At the same time developing countries are now pressing for a preliminary assessment on the level of implementation of the existing agreements, while NGOs demand a study on the environmental impact of trade liberalization. On these bases, an agenda for future negotiations will have to be decided at the Seattle Ministerial Conference in early December.

The preparation of the Seattle Decision on future trade negotiations is starting now and it would therefore prove impossible to try to forecast the outcome at this early stage. However since 1996 different approaches to the new round were detectable. In general terms they can be summarized as follows:

The EEC has been consistently pursuing a comprehensive approach towards the so-called Millennium Round, which requires an expansion of the agenda to non-mandated issues like industrial tariffs and to regulatory activities in new areas such as investment and competition and possibly even controversial issues as environment and social policies.

A large group of countries, from Japan and Argentina to Switzerland and Australia are supporting a similar but narrower broad-based approach. On the opposite side, developing countries are against the project of a comprehensive round, some of them the hard-liners in a straightforward manner while others show a certain amount of flexibility.

However all of them insist greatly on implementation issues, considering that the impact of the Uruguay Round has been less positive than expected, not to say negative for them and that the first aim of the forthcoming negotiations should be a re-balancing of rights and obligations.

The Americans have, on the other hand, been following a sectional approach with a few negotiating issues, including the built-in agenda and emphasizing the new developments in technologies such as biotechnology and electronic commerce. In more recent times there was an American move towards a global approach, but this was too cautious to be taken as significant. With this picture in mind, it is quite evident that it will not be easy to find a constructive in Seattle.

A point of agreement is however that the next round should be rather short, about three years to avoid excessive political tensions and business uncertainties, as happened in the UR. From a merely intellectual point of view, three different clusters can be shaped: the first including market access issues, that is further liberalization of agriculture, services and industrial tariffs; the second dealing with market regulations in all sectors; the third looking for solutions to the unavoidable problems of developing countries, first of all the LDC's.

The links between the three areas are complex but it is hardly possible to have a strong new move towards liberalization of the international trade without significantly improving multilateral rules or responding to the basic demands of developing countries. It appears also quite difficult to achieve very ambitious results in a three-year frame, given the political sensitivity of many issues. Strong political leadership therefore will be needed, together with an improvement in the economic and social context. The overall balance between the three clusters will answer the question as to what kind of new round we are approaching.

Coming now to the specific points of impact of future negotiations on trade related space activities, we should revert to the descriptive part, i.e. GATT, GATS, TRIPS and GPA. Little indeed can be said unfortunately at this stage on specific issues.

As a simply personal guess, it seems likely that liberalization of IT goods, as an ITA2 or part of a more general process, will continue. The pressure for an improvement of international standards in IT products should be increasing. Negotiations for a TRIPS 2 will probably focus on areas of modest interest to space activities, i.e. biotechnologies and protection of geographical indication for agricultural products.

However transfer of technologies to developing countries, going beyond the current TRIPS rule of best endeavour will probably be an important issue in the IPR's area. A little chance on the contrary has to be given to the multilateralization of GPA, in the light of the strongly negative stand of developing countries in opening up their tendering procedure. It is instead of some interest to elaborate shortly on services, or the so-called GATS 2000. There are a few, but important preliminary points to make.

- I. First, most probably the future negotiations will continue to be based on the positive list approach, that is, the liberalization will cover only specific commitments, rather than on the negative list approach, implying that everything is liberalized a part from what is explicitly excluded.
- II. Second, there is still some important left-business, i.e. transport and professional services where post 1995 discussions have not yet produced results.
- III. Third, the WTO work over the last few years on rules, i.e. procurement and safeguards in the service sector, has been progressing very slowly.
- IV. Fourth, developing countries have put an almost exclusive emphasis on the liberalization of the fourth mode of delivery of services, the movement of natural persons. This is one of the most sensitive problems on the trade agenda and developed countries might reach by demanding negotiations on social standards.

This general picture underlines the difficulties to overcome in future negotiations in the services area. Obviously it applies also to the telecommunications sector, which in turn presents additional problems. The 1997 Protocol included also an agreement on the Reference Paper. This R.P. should now be developed and implemented in order to find a solution in the ITU frame, at least to such basic sectoral questions as accounting rates and inter-operability. Universe service is a sensitive area since it is intertwined with the general issue of the social dimension of globalisation. Moreover, the Fourth Protocol has only a short life and new negotiations will start when many developing countries have just engaged in their transitional periods to implement it. furthermore, services liberalisation covers investment aspects and the reference paper mentions also competition rules, which leads us to the more general and controversial question of the comprehensive round. A positive assessment on the prospects for further liberalisation in TLC and related services is realistic but conditional on the solution of a large set of difficult problems.

At the same time the WTO has begun new work in the closely related area of electronic commerce with the aim of adopting a program and possibly elaborating multilateral disciplines. From the EEC point of view, electronic commerce consists essentially in the supply of services through a new means of technology and is therefore subject to GATS rules in reason of the principle of technological neutrality. Like for satellite services technological neutrality implies that liberalisation commitments in content services such as distribution, audio visual etc apply for any means of technology used to supply these services. In contrast, for the Americans electronic commerce might also include virtual good not subject to GATS disciplines, thus raising suspicions in Europe in the audio-visual field. Other issues of regulatory and developmental nature are relevant to the discussion on electronic commerce, from financial services to IPR rights. The Seattle WTO Conference is called to rule also on this. It is premature to anticipate the possible results of the mounting American pressure to reach a deal in this field.

In short, all the negotiating front has begun to move. The entire package of the IT goods and services will be involved. Most probably it will represent an important element of the final global deal. Satellite being a crucial part of it, the space community should make its voice heard to trade negotiators.

Accessions to WTO: Integrating China and Russia

WTO has 134 members to date. 35 countries are negotiating the accession. Many of them are from the former Soviet Union and Yugoslavia and the Middle East, accounting in total less than 10% of world trade. But four of them are big players in the international economy: China, Taiwan, Russia and Saudi Arabia and two of these in space activities: China and Russia. By the Seattle Ministerial a small group, perhaps including China and Saudi Arabia will accede to the WTO. It is impossible to give account on this occasion of the state of the accession process.

The integration of the big players into the multilateral trading rules is clearly of systematic value for the world economy. A legal point can better clarify the situation. The WTO has a

corner stone: the most favoured nation clause according to which trade concessions with few exceptions must be given on a multilateral basis. Non-members, including the above-mentioned countries therefore benefit from this binding rule, while they can maintain in principle selective and discriminatory measures or refuse market access to others.

The reality is ofcourse more nuanced and WTO rules less straight. MFN is the general rule and very widely respected in trade in goods even if the US decide yearly on its concession to certain countries notably to China. The GATS Agreement allows transitionally for MFN exemptions and in current commitments of WTO members there are plenty of exemptions in the service sector, including for instance the EEC in the audio-visual area. The Government Procurement Agreement does not provide for MFN treatment. However within these limits, there is a problem of lack of reciprocity or unfairness or free riding at the disadvantage of WTO members, including the developing ones.

Given the status of space powers of these countries and the size of their markets, the need for an improvement of the situation is all the more evident and accession negotiations in the area of telecommunication and IT goods all the more important. China has already presented an offer in services, while Russia has not yet done so. It is also to be noted that the different negotiating weight of WTO members can result in unbalanced concessions in the opening up of service markets of the acceding countries. Some concerns have already been expressed in this regard, notably on standards and foreign investments. For instance there are fears in Europe that the US could achieve better de facto conditions in some sectors as TLC in China.

From the perspective of space activities, the current negotiations for accession could have as much importance as the future round of trade liberalisation.

WTO and Global Governance

Governments can ensure policy-consistency at the national level while regional bodies and agreements can integrate different policies at least to a certain extent. However the multilateral system remains, with the partial exception of the UN system, sectoral in nature. Over recent years this has raised growing concerns. The WTO is strongly sensitive to this problem since trade has many inter-linkages with other areas. The Marrakesh Agreements include a Ministerial Decision on coherence of global policy-making. Some remarks should be done in this respect.

The first and most obvious means to ensure consistency is the net of Agreements between the WTO Secretariat and other international organizations. Since 1995, several have been concluded. As far as space activities are concerned, there is an Agreement with WIPO and a draft is shortly to be agreed with ITU. Furthermore, many International Organisations were granted observer status on various WTO bodies, what is often reciprocal. All of this can be very useful but certainly not sufficient. The real burden of international consistency still rests with national governments. In view of the next round of negotiations coherence and cooperation among the various interested international bodies become much more important. Some kind of formula involving the Secretariats should be found in order to open up trade negotiations to inputs from other organisations.

On this occasion, which is academic in character, there is another point of systematic interest which is relevant for general international public law. The innovative nature of the WTO DSB system has been emphasised time and again and it has been clearly stated how the use of the DSB can be the signal of a failure to reach solutions somewhere else in the international system.

A couple of cases can be enlightening in this regard. There are WTO disputes, eg. Bananas, which reflect genuine trade conflicts between important WTO member states. This appears to be in the make-up of the international system. But there are other cases where the dispute is largely due to the absence of an internationally agreed rule or standard, whatever their form be. For instance the hormone case shows that there are different health risk assessments in different countries. Science sometimes is not neutral. The core element of the dispute is in fact the lack of binding rules from other relevant organisations and/or absence of schemes for mutual recognition of health standards on a bilateral or regional basis. In such situation, the WTO is compelled to apply its rules protecting primarily trade interests. This is to say that the WTO is interfering in other areas only because others were unable to rule on matters within the scope of their mandate.

However, as was shown in the recent Appellate Body report on the turtle/shrimp case, WTO can recognize trade restrictive measures taken to protect public goods such as environment. This recent evolution of WTO jurisprudence underlines that the WTO is an open legal system which recognises other public values. The exceptions provided for by GATT Art. XX and XXI represent thus the main interface between WTO and other legal systems. The integration of WIPO Conventions into the TRIPS or the inclusion of standardisation activities in the TBT and SPS Agreements are further evidence of the degree of openness of the WTO system.

The borderline between the traditional GATT trade law and international public law is becoming thinner and more transparent. Elaborating further on GATT general exceptions, it must be added that measures taken to protect national security or other public values can be of three different kinds, purely national, national but taken in compliance with international agreements, international. The WTO system has been scarcely tested in this area of general exceptions. WTO member states are in fact self-restraining in bringing disputes to the DSB on these sensitive questions.

The peaceful use of outer space can be recognised at first glance as a clear case for derogating to trade rules, if necessary. In practical terms, derogations to trade rules have the effect of discriminating against a country. The reasons have therefore to be legitimate, strong and clear. Actually national measures or one-sided interpretation of international disciplines can serve trade interests rather than genuine concerns about public goods. This can be true also in regulating trade-related aspects of space activities, it is not intended on this occasion to raise criticisms against the so-called US unilateralism. But as a matter of principle there can be no doubts as to the preference for internationally agreed rules in wavering to GATT disciplines.

The new international system must be rule-based to be both effective and fair. The trading multilateral system is increasingly aware of this. The regulation of outer space activities and their interfaces with trade are a clear case for strong support of this most basic principle.

GATS REGULATION FOR LAUNCH SERVICES: RESOLVING THE UNITED STATES-INDIA CONFLICT

A long time ago, when only the Soviet Union and the United States operated in outer space, launch services were far too limited to be a concern for international trade. The militarily focused space programs prevented any commercialization. However, the growth of telecommunications changed the picture. Upon venturing into the final frontier, mankind created a space industry worth hundreds of billions of dollars.

The demand for telecommunications—television, telephone, radio, and internet—motivated other countries to start launching satellites into orbit. Concomitantly, companies around the world involved in space activities have enjoyed great success.

In the United States, for example, small satellite ("smallsat") companies are booming. However, there is not enough domestic launching infrastructure to meet their demand. Currently, smallsats can only reach orbit if they hitch a ride with larger payloads. Smallsat companies strongly prefer to be the primary payload so they can set their own launch dates.

India owns and operates the world's most coveted smallsat launcher, the Polar Satellite Launch Vehicle (PSLV). The United States is willing to let its smallsat companies freely launch on the PSLV so long as India signs the Commercial Space Launch Act (CSLA), which prohibits India from selling launch services at cheaper prices than those offered by the United States. The United States, for its part, fears that freely importing launch services risks the very existence of its own launch industry. India, however, has refused to sign the CSLA.

The ongoing conflict between India and the United States is not the first in the international trade of launch services. Regulation in this arena is long overdue. Without it, the evolving launch-service landscape threatens to aggravate the problem.

The General Agreement on Trade in Services (GATS) is well-equipped to put an end to the tension that exists in the international trade of launch services. This note examines the United States-India conflict, which is a microcosm of the international situation, through the lens of the GATS.

Section I provides background on the international launch service industry, the United States-India conflict, other similar conflicts within the international trade of launch services, space law, and the GATS. Section II analyzes why regulation of launch services is necessary and how the GATS can facilitate the international trade of launch services by carefully examining the United States—India conflict and debunking the typical misconceptions that arise in this context.

A. THE INTERNATIONAL LAUNCH SERVICE INDUSTRY

The need for telecommunication satellites in orbit led to the development of a global industry that dedicates itself to launching satellites into outer space. A "launch service" includes everything from "contract signing through mission management and onorbit delivery." Initially, only a few countries could sell launch services because the required technology was too advanced. As technology became more accessible, more countries started launching satellites.

Nowadays, many countries reach orbit on a frequent basis; several European countries do so through their private launching service Arianespace, and India does so through its government-run Indian Space Research Organization (ISRO).

China and Japan also launch on a regular basis, and many other countries are eager to follow suit.

The global space economy, largely driven by demand for telecommunications, is skyrocketing. Its value was estimated in 2005 to be between \$170–234 billion. Only a decade later, the value of the space economy reached about \$324 billion.

The tremendous growth has resulted, in part, from the world reaching orbit more frequently. The constant need for internet connectivity has required an ever-increasing amount of satellites in space. India, for example, offers huge potential market for satellite industries because it has a sizable population but much of it is does not yet connect to the internet. Experts predict that launches around the world will increase by thirty percent in order to accommodate for countries such as India.

Although the space economy has grown remarkably and continues to grow, the commercial launch service market has not kept pace. This is because the launching infrastructure is not yet equipped to meet the latent demand generated by smallsat companies. Currently, these smallsats must hitch a ride on launches carrying larger payloads. This is suboptimal as the companies prefer to have their own launches so they can choose their own launch dates.

The new movement in space transportation, "NewSpace," reflects this need for entrepreneurship and innovation in order to meet the demand in the smallsat market. Launch service providers are developing special vehicles that make it easier for smallsats to reach orbit. SpaceX, for example, made aerospace history on March 30, 2017, when it reused a rocket.

Unfortunately, New Space does not provide an immediate solution to the lack of smallsat launch services. Profit-driven companies simply prefer to launch their satellites on an available foreign launch vehicle instead of waiting until domestic launch service industries catch up to speed. The most popular of these foreign launch vehicles is India's PSLV, a rocket that caters towards smallsats, which attracts worldwide demand. On February 15, 2017, the PSLV successfully launched a payload of 104 foreign satellites into orbit, shattering the previously-held record by Russia for the most number of satellites sent into space on a single launch.

However, India subsidizes the PSLV, and American launch service providers worry that they cannot compete with the prices. Fortunately for the American providers, the United States has a longstanding policy against satellite exports (in other words, importing launch services) by American manufacturers. The United States defends its policy by arguing that freely exporting satellites threatens to destroy its launch service industry.

Profit is not the only concern in the international trade of launch services. Some countries are reluctant to send their satellites to foreigners because they worry that the sensitive technology risks national security. In fact, some countries perceive trading satellites to be so dangerous that they have formed international regimes for protection. The most prominent is the Missile Technology Control Regime (MTCR).

It is "an informal and voluntary association of countries which share the goals of non-proliferation of unmanned delivery systems." The MTCR regulates trade with a set of guidelines in the form of two categories of items. "Complete rocket and unmanned aerial vehicle systems (including . . . space launch vehicles . . .)" are the first category, and these items are generally banned as exports. The guidelines give more export flexibility to the second category of items, which consists of missiles that may have uses other than delivering weapons of mass destruction.

Most importantly, the MTCR Guidelines explicitly state that they are "not designed to impede national space programs or international cooperation in such programs as long as such programs could not contribute to delivery systems for weapons of mass destruction." Simply put, the MTCR discourages cooperation when it threatens world security, but otherwise encourages countries to cooperate in launching innocuous items such as telecommunication satellites.

The United States has been a member of the MTCR since its establishment in 1987. India became the newest member in June of 2016. Membership in this regime puts countries in a better position to conduct more launches because it garners trust from the other members. India, for example, gained "access to high-end testing technology for its solid rocket booster propulsion system, which fires up the first stage of the [PSLV]," when it became a member of the MTCR.

United States legislation has dealt with the national security aspects of satellite exports. "Until the late 1980s, [United States] export regulations distinguished between communications satellites built for military, defence and national security purposes and satellites destined for civil and/or commercial use . . ." During this time, the Executive branch decided whether the International Traffic in Arms Regulations (ITAR), controlled by the strict Department of State, or Export Administration Regulations (EAR), controlled by the Department of Commerce, applied.

The enactment of the Strom Thurmond Act in 1998, a reaction to international tension at the time, drastically changed this procedure. The Act stated that

Due to the military sensitivity of the technologies involved, it is in the national security interest of the United States that United States satellites and related items be subject to the same export controls that apply under United States law and practices to munitions . . . all satellites and related items that are on the Commerce Control List of dual-use items . . . shall be transferred to the United States Munitions List

In other words, the executive branch no longer had the power to determine that a satellite could receive lenient export controls under the EAR instead of the strict ITAR controls.

The new categorical regulation severely hindered the United States satellite industry:

The value of contracts lost due to ITAR between 2003 and 2006 was 2.35 billion dollars In 1995, United States satellite manufacturers enjoyed a 75 percent share of the global market; ten years later, this has dropped to 41 percent, and has hovered between 35 and 50 percent since then. ITAR has become a market differentiator

The United States satellite industry begged for reform, and its backlash about overregulation eventually reached Congress. In 2012, the State and Defense Departments submitted a report to Congress that outlined many of the defects of the current export regime. It stated that "the U.S. Government's control of commercial satellites . . . as munitions items is not effective in protecting U.S. national security because some dual-use satellites . . . equivalent to those originating in the United States are available from non-U.S. providers." It also noted that "over the last [fifteen] years, a substantial number of commercial satellite systems . . . have become less critical to national security and during that time, other countries have become more proficient in space technologies." For these reasons, the report recommended that the "authority to determine the appropriate export control status of satellites and space-related items be returned to the President."

Congress listened, and in 2013, it enacted the National Defense Authorization Act, which returned the power to determine satellite export controls to the executive branch. As a result, innocuous items such as telecommunication satellite exports were to be controlled by lenient Department of Commerce controls instead of automatically being controlled by strict Department of State controls.

B. The United States-India Conflict

The ongoing conflict between the United States and India hinges on India's refusal to sign the CSLA. Without India's signature, the United States bans its smallsat companies from freely launching on the highly-coveted PSLV. Although protests from the smallsat companies have pressured the United States into allowing waivers to the ban, the United States only grants these waivers on a case-by-case basis. Smallsat companies greatly prefer to launch at whim on the PSLV. The CSLA protects the American industry from competing with subsidized markets. It prohibits government owned foreign launch service providers from selling launch services at prices lower than those offered by the United States.

The United States launch service industry insists that the prohibition is necessary to prevent itself from being overrun. India, however, refuses to accept the agreement. India feels that its

low prices can make it a prominent player in the international satellite launch market even without the launching of American satellites. Because the CSLA only applies to government-owned launch service providers, India can circumvent it by privatizing the PSLV. In fact, India already has plans to do so by 2020. Privatizing launch services promises to reduce the cost of launches, increase satellite capacity per launch, and increase the quantity of launches per year.

C. Other Conflicts in The International Trade of Launch Services

The United States-India conflict is not the first involving the international trade of launch services. In 1984, Transpace Carriers Inc. (TCI), a United States launch service provider, accused Arianespace of receiving subsidies. Europe countered that the United States restricted its satellite market to United States launch service providers only. The President of the United States eventually determined that he would not take action against Europe.

In 1989, the United States signed an agreement with China that allowed the Eastern power, for the first time, to launch satellites manufactured in the United States. The United States worried that China would run away with the satellite market if left on its own, so the United States-China Agreement contained two limitations: launch quota and price. In 1990, China launched a satellite at half the price that Arianespace was offering. In response, Arianespace accused China of violating the Agreement even though Arianespace was never a party to it. In the end, the United States took no effective enforcement action.

Space law mandates international cooperation. The Outer Space Treaty, which all major launching nations have ratified, states that "in the exploration and use of outer space . . . States Parties to the Treaty shall be guided by the principle of co operation and mutual assistance and shall conduct all of their activities in outer space . . . with due regard to the corresponding interests of all other States Parties to the Treaty."

E. The GATS

The WTO consists of the WTO Agreement and annexed agreements, which include the GATS. Together, they contain the rules on international trade and a Dispute Settlement Body (DSB) for enforcing disputes.

The WTO pursues liberalized world trade. The key to trade liberalization is the breaking down of trade barriers at national borders. The principle of comparative advantage, which holds that countries will always increase their wealth by removing trade barriers, already incentivizes countries to trade with one another. However, domestic policies frequently obstruct this from happening.

The GATS confines its focus to liberalizing trade in services. For example, the market access provisions, found in Article XVI, prohibit measures that limit the "number of service suppliers whether in the form of numerical quotas" or "the total number of service operations." In a similar vein, the national treatment provisions, found in Article XVII, prohibit member states from indirectly favoring domestic suppliers by obligating them to treat all foreign suppliers as nationals.

But the application of these provisions is not automatic. The GATS allows countries to limit the amount of market access and national treatment they pledge in their schedule of commitments, which contradicts the principle of comparative advantage. Additionally, the provisions do not apply to government procurement. Article XIII states that "Articles . . . XVI (market access) and XVII (national treatment) shall not apply to laws, regulations or requirements governing the procurement by governmental agencies of services purchased for governmental purposes and not with a view to commercial resale or with a view to use in the supply of services for commercial sale."

The GATS also addresses national security. In order to protect states' security interests, Article XIV states that "nothing in this agreement shall be construed to require any Member to furnish any information, the disclosure of which it considers contrary to its essential security interests."

Subsidies and emergency safeguards, addressed by Articles XV and X respectively, do not contain binding language like the articles covering market access, national treatment, or security interests. Instead, they are part of the so-called "built-in agenda." "The [built-in agenda] reflects both the fact that not all services-related negotiations could be concluded within the time frame of the Uruguay Round, and that Members have already committed themselves . . . to successive rounds aimed at achieving a progressively higher level of liberalization." Article X, for instance, calls for prompt negotiations on emergency safeguards. Likewise, Article XV requires that states negotiate on subsidies in order to "develop[] the necessary multilateral disciplines to avoid [their] trade-distortive effects." In the meantime, it promises to give those hurt by subsidies "sympathetic consideration." The Sixth WTO Ministerial Declaration instructed negotiators to "intensify their efforts to conclude the negotiations on rule-making."

A. The International Trade of Launch Services Requires International Cooperation

Countries struggle to cooperate with each other in the international trade of launch services. Providers often accuse foreign countries of violating trade rules. When this happens, countries typically retaliate by claiming that they, too, are victims of trade violations. These conflicts lead to trade protectionism, as witnessed in the current stand-off between the United States and India. The United States is blocking India from freely launching United States satellites because India is allegedly subsidizing its launch services.

Non-cooperation and protectionism is problematic for several reasons. First, it handicaps the space economy, of which the United States is particularly illustrative. When the Strom Thurmond Act was in force, the United States satellite industry reported losses in the billions and a dramatic drop in market share. Though Congress eventually repealed the legislation, the satellite industry continues to struggle as a result of United States policy with India. The inability of the smallsat market to take off substantially reduces the economic potential of the space industry because telecommunication services are its largest subsector.

Second, countries' refusal to trade launch services constitutes a violation of space law. The Outer Space Treaty states that "in the exploration and use of outer space . . . States Parties

to the Treaty shall be guided by the principle of co operation and mutual assistance and shall conduct all of their activities in outer space . . . with due regard to the corresponding interests of all other States Parties to the Treaty." Launch services are certainly an outer space activity, so conflicts such as United States-India are in breach of space law.

Third, non-cooperation blocks access to new business opportunities. NewSpace is introducing new types of vehicles that achieve economies of scale. SpaceX, for example, can now earn greater revenue with less production costs because of its reusable rocket. Greater economies of scale create business opportunities by broadening trade space. However, the inability to contract with foreign entities limits companies from taking advantage of these fresh opportunities. Thus, NewSpace adds tremendous pressure for international cooperation.

Last, the demand for telecommunication services is geographically shifting. Countries such as India have enormous populations that are just beginning to go online. The growing Eastern demand can cripple Western launch industries if they neglect trade. Therefore, the changing demand for telecommunication services threatens to further rupture the space economy.

On the other hand, trade in launch services is brim with potential if launch nations reduce protectionism. All stand to benefit from increased trade because of the principle of comparative advantage, and the untapped profit is astronomical given the size of the space economy. Thus, if the goal is to maximize wealth, launch nations must find a way to cooperate.

B. The GATS Facilitates Cooperation in The Trade of Launch Services

The GATS can facilitate the necessary cooperation, as it provides a regulatory framework where countries can trade launch services effectively.

Analysing the United States—India conflict is an excellent demonstration of this because it is a microcosm of the global situation. Its central issues have already occurred in previous conflicts. Like the United States, TCI alleged subsidization, and like India, Arianespace counter-alleged that the United States restricted the use of its satellite market to United States launch vehicles only. Similarly, Arianespace's allegation that China violated the United States—China Agreement served as a precursor to the ongoing United States insistence that India sign the CSLA because the United States, like Arianespace, wants regulation. Neither of the previous conflicts witnessed any sort of resolution. As a result, resolving the United States-India conflict solves many issues that have been left unsettled.

The analysis proceeds by first demonstrating how the GATS can resolve the United States-India conflict, and then debunking the typical misconceptions that arise when considering the GATS control of launch services.

1. The GATS can Resolve the United States-India Conflict

The GATS framework allows India to launch American satellites at whim on the PSLV without undermining the United States launch service industry. With this in mind, both countries should seek GATS regulation immediately. The United States can finally end the tension between its satellite and launch industries and soothe domestic relations. India holds a crucial bargaining chip because it owns the world's most successful smallsat rocket at a time when smallsats are desperately seeking orbit. Although India boasts that it can take charge in the market without launching United States rockets, the innovative United States launch service industry will soon catch up to speed. Therefore, it is in India's best interests to negotiate trading rules during the short time it has leverage.

The GATS specifically helps the United States by giving them an advantage at a crucial moment in international lawmaking. Article XV awards the United States "sympathetic consideration" as victim to India's subsidized launch services.

Having "sympathetic consideration" is key in trade negotiation because the GATS, though lacking in binding language, vehemently condemns subsidization. Article XV requires that countries negotiate in order to "develop[] the necessary multilateral disciplines to avoid [their] trade

distortive effects." The legal obligation to discuss rules on subsidies is an example of how extremely uncomfortable the members of the GATS system are with allowing countries to trade unfairly. The Sixth WTO Ministerial Declaration adds to the urgency to create rules on subsidies by demanding that countries "intensify their efforts to conclude the negotiations on rule-making." Therefore, the United States can expect the "sympathetic consideration" to be substantial.

As such, the United States finds itself in a strong legal position at a very pivotal moment in international lawmaking. Countries must write trade rules on launch services immediately given the harm without them. The United States is under additional pressure because of the accelerating demand for launch services in the East. Negotiating defensive trade rules on launch services with Eastern powers is nothing new to the United States. The United States-China Agreement, with its launch and price quotas, is an example of the United States' prior history of bargaining with Eastern powers to mitigate their strengthening launch services. Thus, it is in the best interests of the United States to draw multilateral trade rules now while it has legal bonuses such as "sympathetic consideration."

The GATS also helps India. Specifically, the GATS improves India's access to United States satellites. The CSLA requirement that India price its services either at or above United States prices violates the GATS because it is a limitation on a service. Any limit on the total value of service transactions, unless otherwise specified within the schedule of commitments, is a violation of Article XVI.

Albeit, the United States can avoid the violation by limiting market access or national treatment obligations in its schedule of commitments. Both of these courses of action defeat

the whole purpose of including launch services in the GATS and make India unlikely to commit to GATS regulation.

Fortunately, this will not be the case because the GATS, as discussed above, is also crucial to the United States. Therefore, the GATS improves India's ability to launch United States satellites.

Some aspects of the GATS are equally beneficial to both the United States and India. For example, the provision on emergency safeguards incentivizes the two countries to incorporate GATS regulation in the international trade of launch services because with it, the United States does not have to worry about the destruction of its domestic launch service industry, which means that India can export launch services more easily.

The United States may counter that it does not matter that the GATS contains emergency safeguard measures if there is no express permission to use them; they are merely part of the built-in agenda. This is not the case. Notwithstanding the lack of binding language, the GATS fiercely supports the use of emergency safeguard measures.

The GATS will not idly witness the destruction of one of its member's industries without a whole-hearted attempt to find a solution. Article X explicitly states "there *shall* be multilateral negotiations on the question of emergency safeguard measures." Moreover, the Sixth WTO Ministerial Declaration demands that countries "*intensify* their efforts to conclude the negotiations on rule-making." The sense of urgency shows that the GATS should apply at least some sort of legality to safeguards until the negotiations reach a conclusion. Thus, the GATS will fervently strive to protect the United States launch service industry if it ever reaches dire straits.

Comity also obligates India to allow the United States to exercise emergency safeguards if its launch service industry ever faces destruction. Trade in launch services already abides by comity. The MTCR, for example, is voluntary and informal, reducing the risks of weapons proliferation. Similarly, trade in launch services depends on cooperation for the mutual benefit of comparative advantage. India is undermining international prosperity if it launches United States satellites without any regard for the well-being of the United States launch industry.

Therefore, the United States can expect India to allow for emergency safeguards for reasons of comity.

The United States can also trust that India will allow it to exercise safeguards because of space law. The Outer Space Treaty states that "[i]n the exploration and use of outer space . . . States Parties to the Treaty shall be guided by the principle of co-operation and mutual assistance and shall conduct all of their activities in outer space . . . with due regard to the corresponding interests of all other States Parties to the Treaty." If the United States satellite industry ever faces trouble, India violates space law if it refuses to allow the United States to exercise emergency safeguards because that is blatant disregard for the "corresponding

interests of all other States Parties to the Treaty." As a result, the United States can exercise GATS emergency safeguards if necessary.

Another aspect of the GATS that benefits both India and the United States is the DSB. When TCI complained that Arianespace was being subsidized, the United States government did nothing about it. When Arianespace complained that China was violating the United States-China agreement, no enforcement action occurred. The lack of enforcement is problematic because it discourages countries and companies from trusting one another. Therefore, the United States should be willing to commit its launch service industry under the GATS because it contains enforcement mechanisms to ensure that India stays true to the trade rules. Likewise, India should be secure in knowing that the DSB prevents the United States from breaching its own obligations, such as failing to abide by its schedule of commitments.

The analysis above illustrates how the GATS preserves the United States launch industry even with waiver-less imports of India's launch services, and why both countries should seek GATS regulation immediately.

2. The Misconceptions of the GATS Regulation of Launch Services

Naturally, entering into a trading regime brings its own set of issues. There are two major concerns that typically arise when considering the application of GATS regulation: government procurement and national security interests.

First, government procurement may be relevant to the international trade of launch services; even though privatization is sweeping the space industry, some state governments still control their own space programs. The concern is that the GATS cannot regulate trade in launch services because of Article XIII, which states that "Articles . . . XVI [market access] and XVII [national treatment] shall not apply to laws, regulations or requirements governing the procurement by governmental agencies of services purchased for governmental purposes and not with a view to commercial resale or with a view to use in the supply of services for commercial sale." Article XIII certainly applies to the United States-India conflict because the PSLV is owned and operated by the Indian government . . . at the moment. India plans to privatize the PSLV as early as 2020. The small timeframe means that any concern over Article XIII is short-lived.

National security is the second misconception that arises when considering GATS regulation of trade in launch services. Scholars argue that if the GATS controls trade in launch services, then Article XIV becomes the GATS "baseline rule instead of the exception." India can argue, for instance, that the United States can rely on Article XIV to dodge its obligations by alleging that trading its satellites across borders is a security risk. However, both the United States' own legislation and the MTCR demonstrate that importing launch services is a harmless activity.

The repeal of the Strom-Thurmond Act in 2013, for instance, proves that trading launch services cannot possibly be a security risk. Although it guaranteed limited access to United States technology by regulating all satellite exports under the strict ITAR controls, the

legislation infuriated the United States satellite industry which in turn pleaded for legislative reform.

The Departments of State and Defense themselves supported the satellite industry by pointing out that the "sensitive" technology was in fact already accessible in other countries, and "a substantial number of commercial satellite systems . . . have become less critical to national security." The eventual enactment of the National Defense Authorization Act for Fiscal Year 2013 proves that the Strom-Thurmond Act was overbearing. Therefore, exporting satellites (or importing launch services) do not threaten national security.

The MTCR, of which both India and the United States are members, also shows how trading launch services is harmless, which means that countries cannot rely on the national security loopholes found in Article XIV. First, the MTCR is eager to accommodate for trade in telecommunication satellites because the second category allows for more flexibility. The guidelines can keep it simple by putting a general ban on everything, but this deters trade. If trading satellites is compatible with the regime against missile proliferation, then they must be innocuous.

Second, countries already trade with each other under the MTCR. Although the overarching purpose of the MTCR—to reduce the risk of missile proliferation—suggests that there should not be any liberalized trading among launch nations, the MTCR Guidelines explicitly state that they are "not designed to impede national space programs or international cooperation in such programs as long as such programs could not contribute to delivery systems for weapons of mass destruction." Members to the MTCR treat this language as a blessing to fully cooperate even though exporting satellites to a foreign launch service provider can arguably be seen as always improving another state's missile programs. India, for example, can now access high-end technology for its PSLV because of the trust it earned after joining the regime. Therefore, trading launch services is safe because even the MTCR, the most prominent regime in mitigating the risks associated with trading launch services, encourages countries to cooperate.

In sum, countries cannot claim national security risks as an excuse to avoid trading obligations with launch services, which further paves the way for the GATS.

RELEVANCE OF INTELLRCTUAL PROPERTY LAWS IN OUTER SPACE: INDIAN PERSPECTIVE

Like other sectors, outer space is also affected by globalization and privatization and many private business entities are actively participating in collaboration with the government to achieve new milestones in the outer space. These private entities perform various services like broadcasting, sensing from space, fabrication, a supply of materials to manufacture the launch vehicles, etc. In India, Indian Research Space Organization (ISRO) is the primary body working in the field of outer space under the Department of Science. With the involvement of private players in space-related activities, it has become pertinent to develop our international treaties on outer space to cater to various aspects. Intellectual Property is one of such aspects on which the consideration of the world community is required.

As the activities of research and development in outer space involve a huge amount of investment and, it is quintessential to recognize intellectual property in outer space. The protection of intellectual property will ensure more participation of private business entities in the development of space technology.

Despite various restrictions and the enjoyment of monopoly by the public sector in outer space, various space start-ups have emerged in the recent past. Some of these start-ups even manufacture entire satellites, which may be launched by the ISRO rockets or other foreign private companies such as SpaceX, if the laws in future allow them to do so. These private players are now formally allowed to use the infrastructure of ISRO including launch pads, vehicles, etc. To facilitate this, the Government established the Indian National Space, Promotion & Authorization Centre (IN-SPACE) under the Department of Science.

IN-SPACE will work in collaboration with the government-owned company, New Space India Limited (NSIL). The needs and demands of the private players, including educational and research institutions, and sharing of the infrastructure of ISRO by the private players will be assessed by IN-SPACE, thus, it will act as an interface between ISRO and the private players. The latter is responsible for acting as the aggregator of user requirements and obtains commitments, operationalization of launch vehicles, and commercialization of launches, satellites and services. This move has been accepted with open hands by all the stakeholders. With this step of the Government, the private players are allowed to participate in the commercial activities and ISRO can now focus on more substantial areas such as exploration, scientific missions and defence.

The Relevance of IP in Outer Space

IP in Outer Space is a very big thing in the IP world as almost all the aspects of outer space involve IP in some form. The grant of IP in outer space activities is of significant importance due to the fact that in the past few years, IP has become more of a private or commercial affair and is not restricted to a state-run activity. The protection that the IP law offers to the holder of the IP increases its demand and value.

The implication from the term IPR in Space is that it indicates that the State is willing and capable to grant protections to creations that are outside the conventional territorial boundaries (i.e. in Space). With the grant of protection of IP, the holder of the IP will be able to prevent others from using or exploiting his rights without his permission by taking a legal recourse. Various activities in the outer space that involves IP protection are vehicles/objects used for such activities, actions performed within a territory of a state for such outer space activities, the technology used in such activities which is a result of the intellectual creation of any person. These technologies include remote sensing, direct broadcasting, research and manufacturing.

With the continuous technological advancements, the business opportunities in outer space are increasing and they might involve IP issues. From this, it can be concluded that the IP in space is the next big thing in the IP world as creating of such rights will attract more players to participate and contribute in the exploration of outer space.

IP in Outer Space: Indian Perspective

Like other countries, the position of IP laws in space-related activities is at the nascent stage in India. India is a member to the International Conventions like The Outer Space Treaty of 1967, The Rescue Agreement of 1968, The Liability Convention of 1972, The Registration Convention of 1975, The Moon Treaty of 1979 etc. despite this the situation is not different in India and there is no specific national space legislation. To support the overall growth of space activities in India there is a need for national space legislation and in the light of the same, the government is going to introduce the Space activities bill, 2017 which has been submitted to the prime minister.

The bill is proposed with the aim of promoting and regulating the space activities of India and to encourage the participation private business entities in space activities in India under the guidance and authorization of the government through the Department of Space. Section 25 of the proposed bill deals with the provisions of protection of intellectual property rights created in the course of any space-related activities. But the problem with the provision is that it proposes that the intellectual property right created onboard a space object shall be deemed to be the property of the Central Government. In essence, if Google were to launch a satellite from India, will it not own the pictures the satellite clicks? Despite the move of the government to include private participants in space activities, the bill does not address and protects the interests of the private entities. The bill also fails to deal with certain important provisions like orbital patents, flags of convenience.

The announcement made by the government to include private players in space activities and the proposal of the Space Activities Bill 2017 shows willingness and clear intent of the government in respect of protection of space IP. Even though it could be said that there are several complications and irregularities to be addressed but the government's notice and inclusion of a section in respect of the same shows its willingness – it's a start.

Need for Development in International Treaties

There is an urgent requirement for an internationally accepted legal framework governing intellectual property in outer space activities. Since a majority of nations are already signatories of the 1967 Outer Space Treaty, 1968 rescue agreement and other similar treaties, it would be highly beneficial if the scope of such treaties is expanded to cover intellectual property rights. Along with it, the nations should enact specific national space legislation incorporating the aspect of IP in space in lines of the international treaties.

In addition to this, the Madrid Protocol can be expanded to cover off-world issues. In the current WIPO Madrid Protocol having more than 106 members, a new protocol can be added to the treaty (that would amend the accession process as set out in Article 14 to allow these areas to become jurisdictions). Furthermore, a new treaty can also be enacted on the same lines of the IP sections of the ISS Intergovernmental Agreement 1999, or the present treaty can be amended to include the provision of intellectual property off-world. It is a high that an international treaty is adopted by the members of the world community which covers the scope of protection for intellectual property in space activities and simultaneously provides

enforcement mechanisms to protect from infringement, the rights of the owner of such intellectual property.

SPACE ECONOMY AND TRADE LAW ASPECTS OF OUTER SPACE IN A NUTSHELL

The value of the global space economy has soared, reaching a value of hundreds of billions of dollars. However, the smallsat market has not kept pace because smallsat companies cannot personalize their launch dates. Currently, the lacking launch infrastructure in the United States limits them to launching smallsats as secondary payloads.

India's rocket, the PSLV, caters towards smallsats and earns worldwide demand. However, the United States prohibits its satellite companies from using foreign launch vehicles such as the PSLV. The United States reasons that subjecting its launch market to foreign competition may destroy it.

If the United States-India conflict were regulated according to the GATS, then the stand-off between India and the United States would come to an end. This is beneficial to both countries because of the principle of comparative advantage.

Essentially, the GATS facilitates trading launch services by both encouraging and compelling India and the United States to abide by proper trade rules.

Although the nature of launch services suggests incompatibility with the GATS because of government procurement and national security interests, in reality there is nothing that will obstruct its application. Privatization is sweeping the global space industry. Congress once restricted satellite exports through legislation for security reasons, but repealed that legislation in 2013 because the widespread availability of satellite technology makes protecting it a frivolous exercise. Even the MTCR, a regime against missile proliferation, encourages countries to cooperate in their trade of telecommunication satellites.

Non-cooperation among the spacefaring nations, which is a violation of space law, is needlessly hampering the space economy. Countries can facilitate the growth of the space economy by bestowing the launch service market to the GATS. After all, global regulation is only a matter of time because international interaction is only increasing.

MODULE-V

DISPUTE SETTLEMENT MECHANISM

THE DISPUTE SETTLEMENT MECHANISM:

The WTO Agreement provides for the discipline applicable to all dispute settlement procedures is the "Understanding on Rules and Procedures Governing the Settlement of Disputes" or Dispute Settlement Understanding (DSU). The WTO dispute settlement mechanism also contains provisions for special or extra procedures under agreements such as Articles XXII and XXIII of GATS (General Agreement on Trade in Services) as well as the procedures and rules of the Appellate Body. The mechanism covers the procedures for mediation, conciliation, good offices and arbitration, and the core part of those procedures includes "consultation" and "panel procedures" and a series of other procedures relevant to them.

The WTO dispute settlement system, as it has been operating since 1 January 1995, did not fall out of the blue. It is not a novel system. On the contrary, this system is based on, and has absorbed, almost fifty years of experience with the resolution of trade disputes in the context of the GATT 1947. Article 3.1 of the DSU states:

"Members affirm their adherence to the principles for the management of disputes heretofore applied under Articles XXII and XXIII of GATT 1947, and the rules and procedures as further elaborated and modified herein."

GATT DISPUTE SETTLEMENT (1948-1995)

GATT 1947

As explained above, the GATT 1947 was not conceived as an international organization for trade. The GATT 1947 therefore did not provide for an elaborate dispute settlement system. In fact, the GATT 1947 contained only two brief provisions relating to dispute settlement: Articles XXII and XXIII.

Under the GATT 1947, a dispute, which parties failed to resolve through consultations, was in the early years of the GATT "handled" by working parties set up pursuant to Article XXIII:2. These working parties consisted of representatives of all interested Contracting Parties, including the parties to the dispute, and made decisions on the basis of consensus. From the 1950s however, a dispute was usually first heard by a so-called "panel" of three to five independent experts from GATT Contracting Parties not involved in the dispute. This panel then reported to the GATT Council, consisting of all Contracting Parties, which would have to adopt by consensus the recommendations and rulings of the panel before they would become legally binding on the parties to the dispute.

The dispute settlement procedures and practices, which were developed over the years in a pragmatic ad hoc manner, were progressively codified and supplemented by decisions and understandings on dispute settlement adopted by the Contracting Parties. In 1983, a GATT Legal Office was established within the GATT Secretariat, to help panels, often composed of trade diplomats without legal training, with the drafting of panel reports. As a result, the legal quality of panel reports improved and the confidence of the Contracting Parties in the panel system increased. During the 1980s, previous panel reports were increasingly used as a sort

of "precedent" and the panels started using customary rules of interpretation of public international law.

Legalization

In view of these developments in the GATT dispute settlement system since the 50s, Bob Hudec speaks of the increasing "legalization" of the GATT's "diplomat's jurisprudence". The GATT dispute settlement system evolved from a power-based system of dispute settlement through diplomatic negotiations into a system that had many features of a rules-based system of dispute settlement through adjudication.

Success & Failure

While the GATT dispute settlement has generally been considered as quite successful in fully or partially resolving disputes to the satisfaction of the complaining party, the system had some serious shortcomings, which became ever more acute in the 1980s and the early 1990s. The most important shortcoming of the system was that the decision on the establishment of a panel, the decision on the adoption of the panel report and the decision to authorize the suspension of concessions, were to be taken by the GATT Council by consensus. The responding party could thus delay or block any of these decisions and thus paralyse or frustrate the operation of the dispute settlement system. In particular, the adoption of panel reports became a real problem from the late 1980s onwards. The fact that the losing party could prevent the adoption of the panel report meant that panels were often tempted to arrive at a conclusion that would be acceptable to all parties. Whether that conclusion was legally sound and convincing was not a prime concern. Furthermore, the Contracting Parties regarded the dispute settlement process as unable to handle many of the politically sensitive trade disputes since the assumption was that the respondent would refuse to agree to the establishment of a panel or the losing party would prevent the adoption of the panel report. As a result, some Contracting Parties, and, in particular, the United States, resorted increasingly to unilateral action against measures they considered in breach of GATT law.

THE WTO DISPUTE SETTLEMENT UNDERSTANDING

Uruguay Round

The improvement of the GATT dispute settlement system was high on the agenda of the Uruguay Round negotiations. The 1986 Punta del Este Ministerial Declaration on the Uruguay Round stated with regard to dispute settlement:

"In order to ensure prompt and effective resolution of disputes to the benefit of all contracting parties, negotiations shall aim to improve and strengthen the rules and the procedures of the dispute settlement process, while recognizing the contribution that would be made by more effective and enforceable GATT rules and disciplines. Negotiations shall include the development of adequate arrangements for overseeing and monitoring of the procedures that would facilitate compliance with adopted recommendations."

Already in 1989, the negotiators were able to reach agreement on a number of improvements to the GATT dispute settlement system. These improvements included the recognition of the right to a panel and strict timeframes for panel proceedings. No agreement was reached, however, on the most difficult issue of the adoption of panel reports by consensus. This issue was only resolved in the final stages of the Round and was linked to the introduction of appellate review of panel reports.

DSU

The Understanding on Rules and Procedures Governing the Settlement of Disputes, commonly referred to as the Dispute Settlement Understanding or DSU, is attached to the WTO Agreement as Annex 2 and constitutes an integral part of that Agreement. The DSU provides for an elaborate dispute settlement system and is often referred to as one of the most important achievements of the Uruguay Round negotiations. The most significant innovations to the GATT dispute settlement system concern: (1) the quasi-automatic adoption of requests for the establishment of a panel, of dispute settlement reports and of requests for the authorization to suspend concessions; (2) the strict timeframes for various stages of the dispute settlement process; and (3) the possibility of appellate review of panel reports. The latter innovation is closely linked to the quasi-automatic adoption of panel reports and reflects the concern of Members to ensure high-quality panel reports.

WTO DISPUTE SETTLEMENT TO DATE

Use made of the System

The WTO dispute settlement system has been operational for almost eight years now and in that period it has arguably been the most prolific of all international dispute settlement systems. Since 1 January 1995, a total of 268 disputes have been brought to the WTO system for resolution. In more than one fifth of the disputes brought to the WTO system, the parties were able to reach a mutually agreed solution through consultations or the dispute was resolved otherwise without recourse to adjudication. In other disputes, parties have resorted to adjudication and, to date, such adjudication procedures have been completed in some 80 disputes. There are currently 19 disputes pending before panels and, very exceptionally, none before the Appellate Body. With different degrees of intensity, pre-adjudication consultations between parties to a dispute are currently being held in 209 disputes at the time of writing.

OBJECT AND PURPOSE OF THE WTO DISPUTE SETTLEMENT SYSTEM

Article 3.2 of the DSU states: "The dispute settlement system of the WTO is a central element in providing security and predictability to the multilateral trading system. The Members recognize that it serves to preserve the rights and obligations of Members under the covered agreements, and to clarify the existing provisions of those agreements in accordance with customary rules of interpretation of public international law. Recommendations and rulings of the DSB cannot add to or diminish the rights and obligations provided in the covered agreements."

Article 3.7 of the DSU states in relevant part: "The aim of the dispute settlement mechanism is to secure a positive solution to a dispute. A solution mutually acceptable to the parties to a dispute and consistent with the covered agreements is clearly to be preferred."

WTO Members have explicitly recognized that the prompt settlement of disputes arising under the covered agreements "is essential to the effective functioning of the WTO and the maintenance of a proper balance between the rights and obligations of Members." The declared object and purpose of the WTO dispute settlement system is to achieve "a satisfactory settlement" of disputes in accordance with the rights and obligations established by the covered agreements. Furthermore, the object and purpose of the dispute settlement system is for Members to seek redress for a violation of obligations or other nullification or impairment of benefits through the multilateral procedures of the DSU, rather than through unilateral action.

Article 23.1 of the DSU states: "When Members seek the redress of a violation of obligations or other nullification or impairment of benefits under the covered agreements or an impediment to the attainment of any objective of the covered agreement, they shall have recourse to, and abide by, the rules and procedures of this Understanding."

It should be recalled that concerns regarding unilateral actions by the United States against what it considered to be violations of GATT law, were one of the driving forces behind the negotiations of the DSU.

The DSU expresses a clear preference for solutions mutually acceptable to the parties reached through negotiations, rather than solutions resulting from adjudication. Article 3.7, quoted above, states in relevant part that a solution mutually acceptable to the parties to a dispute is "clearly to be preferred".

Accordingly, each dispute settlement proceeding must start with consultations between the parties to the dispute with a view to reaching a mutually agreed solution. To resolve disputes through consultations is obviously cheaper and more satisfactory for the long-term trade relations with the other party to the dispute than adjudication by a panel.

JURISDICTION

Scope of Jurisdiction

The WTO dispute settlement system has jurisdiction over any dispute between WTO Members arising under what are called the covered agreements. The covered agreements are the WTO agreements listed in Appendix 1 to the DSU, including the WTO Agreement, the GATT 1994 and all other Multilateral Agreements on Trade in Goods, the GATS, the TRIPS Agreement and the DSU. Article 1.1 of the DSU establishes "an integrated dispute settlement system" which applies to all of the covered agreements. The DSU provides for a single, coherent system of rules and procedures for dispute settlement applicable to disputes arising under any of the covered agreements.

However, some of the covered agreements provide for a few special and additional rules and procedures "designed to deal with the particularities of dispute settlement relating to obligations arising under a specific covered agreement". Pursuant to Article 1.2 of the DSU, these special or additional rules and procedures prevail over the DSU rules and procedures to the extent that there is a "difference", i.e., a conflict, between the DSU rules and procedures and the special and additional rules and procedures.

Compulsory Jurisdiction

The jurisdiction of the WTO dispute settlement system is compulsory in nature. Pursuant to Article 23.1 of the DSU, quoted above, a complaining Member is obliged to bring any dispute arising under the covered agreements to the WTO dispute settlement system.

As a matter of law a responding Member, on the other hand, has no choice but to accept the jurisdiction of the WTO dispute settlement system. With regard to the latter, we note that Article 6.1 of the DSU states: "If the complaining party so requests, a panel shall be established at the latest at the DSB meeting following that at which the request first appears as an item on the DSB's agenda, unless at that meeting the DSB decides by consensus not to establish a panel."

Unlike in other international dispute settlement systems, there is no need for the parties to a dispute arising under the covered agreements to accept in a separate declaration or separate agreement the jurisdiction of the WTO dispute settlement system to adjudicate that dispute. Accession to the WTO constitutes consent to and acceptance of the compulsory jurisdiction of the WTO dispute settlement system. With regard the jurisdiction of the WTO dispute settlement system, it should also be noted that the system has only contentious, and no advisory, jurisdiction.

ACCESS TO WTO DISPUTE SETTLEMENT

Access to, that is, the use of, the WTO dispute settlement system is limited to Members of the WTO. The Appellate Body ruled in US – Shrimp: "It may be well to stress at the outset that access to the dispute settlement process of the WTO is limited to Members of the WTO. This access is not available, under the WTO Agreement and the covered agreements as they currently exist, to individuals or international organizations, whether governmental or non-governmental. Only Members may become parties to a dispute of which a panel may be seized, and only Members "having a substantial interest in a matter before a panel" may become third parties in the proceedings before that panel. Thus, under the DSU, only Members who are parties to a dispute, or who have notified their interest in becoming third parties in such a dispute to the DSB, have a legal right to make submissions to, and have a legal right to have those submissions considered by, a panel."

The WTO dispute settlement system is a government-to-government dispute settlement system for disputes concerning rights and obligations of WTO Members.

Causes of Action

Each covered agreement contains one or more consultation and dispute settlement provisions. These provisions set out when a Member can have recourse to the WTO dispute settlement system. For the GATT 1994, the relevant provisions are Articles XXII and XXIII. Of particular importance is Article XXIII:1 of the GATT 1994, which states:

"If any Member should consider that any benefit accruing to it directly or indirectly under this Agreement is being nullified or impaired or that the attainment of any objective of the Agreement is being impeded as the result of

- (a) the failure of another Member to carry out its obligations under this Agreement, or
- (b) the application by another Member of any measure, whether or not it conflicts with the provisions of this Agreement, or
- (c) the existence of any other situation, the Member may, with a view to the satisfactory adjustment of the matter, make written representations or proposals to the other Member or Members which it considers to be concerned."

In India – Quantitative Restrictions, the Appellate Body held:

"This dispute was brought pursuant to, inter alia, Article XXIII of the GATT 1994. According to Article XXIII, any Member which considers that a benefit accruing to it directly or indirectly under the GATT 1994 is being nullified or impaired as a result of the failure of another Member to carry out its obligations, may resort to the dispute settlement procedures of Article XXIII. The United States considers that a benefit accruing to it under the GATT 1994 was nullified or impaired as a result of India's alleged failure to carry out its obligations regarding balance-of-payments restrictions under Article XVIII:B of the GATT 1994. Therefore, the United States was entitled to have recourse to the dispute settlement procedures of Article XXIII with regard to this dispute."

The consultation and dispute settlement provisions of most other covered agreements incorporate by reference Articles XXII and XXIII of the GATT 1994. For example, Article 11.1 of the SPS Agreement, entitled "Consultations and Dispute Settlement", states: "The provisions of Articles XXII and XXIII of GATT 1994 as elaborated and applied by the Dispute Settlement Understanding shall apply to consultations and the settlement of disputes under this Agreement, except as otherwise specifically provided herein."

As was the case in India – Quantitative Restrictions, the nullification or impairment of a benefit or the impeding of the realization of an objective may, and most often will, be the result of a violation of an obligation prescribed by a covered agreement. Nullification or impairment or the impeding of the attainment of objectives may however, also be the result of "the application by another Member of any measure, whether or not it conflicts with the provisions" of a covered agreement. Nullification or impairment or the impeding of the attainment of objectives may equally be the result of "the existence of any other situation."

Unlike other international dispute settlement systems, the WTO system thus provides for three types of complaints: "violation" complaints, "non-violation" complaints and "situation" complaints. In the case of a "non-violation" complaint or a "situation" complaint, the complainant must demonstrate that there is nullification or impairment of a benefit or the achievement of an objective is impeded. With regard to a "violation" complaint, however, Article 3.8 of the DSU states:

"In cases where there is an infringement of the obligations assumed under a covered agreement, the action is considered prima facie to constitute a case of nullification or impairment. This means that there is normally a presumption that a breach of the rules has an adverse impact on other Members parties to that covered agreement, and in such cases, it shall be up to the Member against whom the complaint has been brought to rebut the charge."

Violation complaints are by far the most common type of complaints. To date, there have, in fact, been few non-violation complaints and no situation complaints. The difference between the WTO system and other international dispute settlement systems on this point may therefore, be "of little practical significance".

There is no explicit provision in the DSU requiring a Member to have a "legal interest" in order to have recourse to the WTO dispute settlement system. It has been held that such a requirement is not implied either in the DSU or any other provision of the WTO Agreement.109 In EC – Bananas III, the Appellate Body held:

"we believe that a Member has broad discretion in deciding whether to bring a case against another Member under the DSU. The language of Article XXIII:1 of the GATT 1994 and of Article 3.7 of the DSU suggests, furthermore, that a Member is expected to be largely self-regulating in deciding whether any such action would be "fruitful"."

The Appellate Body explicitly agreed with the statement of the Panel in EC – Bananas III that: with the increased interdependence of the global economy, Members have a greater stake in enforcing WTO rules than in the past since any deviation from the negotiated balance of rights and obligations is more likely than ever to affect them, directly or indirectly."

In EC – Bananas III, the Appellate Body considered in deciding whether the United States could bring a claim under the GATT 1994, the fact that the United States is a producer and a potential exporter of bananas, the effects of the EC banana regime on the United States internal market for bananas and the fact that the United States claims under the GATS and the GATT 1994 were inextricable interwoven. The Appellate Body subsequently concluded that "[t]aken together, these reasons are sufficient justification for the United States to have brought its claims against the EC banana import regime under the GATT 1994." The Appellate Body added, however, that "this does not mean though, that one or more of the factors we have noted in this case would necessarily be dispositive in another case."

Involvement of Non-State Actors

As noted above, the WTO dispute settlement system is a government-togovernment dispute settlement system for disputes concerning rights and obligations of WTO Members. Individuals, companies, international organizations or non-governmental organizations, including environmental and human rights NGOs, labour unions and industry associations, have no access to the WTO dispute settlement system. They cannot bring claims of violation of WTO rights or obligations. Under the current rules, they do not have the right to be heard or the right to participate, in any way, in the proceedings. However, under Appellate Body case law, panels and the Appellate Body have the right to accept and consider written briefs submitted by individuals, companies or organisations. The acceptance by panels and the Appellate Body of these briefs, which are commonly referred to as amicus curiae briefs ("friend of the court" briefs), has been controversial and criticised by most WTO Members.

The WTO dispute settlement system provides for more than one dispute settlement method. The DSU allows for the settlement of disputes through consultations (Article 4 of the DSU); through good offices, conciliation and mediation (Article 5 of the DSU); through adjudication by ad hoc panels and the Appellate Body (Articles 6 to 20 of the DSU) or through arbitration (Article 25 of the DSU).

As discussed above, the DSU expresses a clear preference for solutions mutually acceptable to the parties to the dispute, rather than solutions resulting from adjudication. Therefore, resort to adjudication by a panel must be preceded by consultations between the complaining and responding parties to the dispute with a view to reaching a mutually agreed solution.

If consultations fail to resolve the dispute, the complaining party may resort to adjudication by a panel and, if either party to the dispute appeals the findings of the panel, the Appellate Body.

The dispute settlement methods set out in Articles 4 to 20 of the DSU (consultations and adjudication by panels and the Appellate Body) are by far the most frequently used methods. However, the WTO dispute settlement system provides for expeditious arbitration as an alternative means of dispute settlement. Pursuant to Article 25 of the DSU, parties to a dispute arising under a covered agreement may decide to resort to arbitration, rather than follow the procedure set out in Articles 4 to 20 of the DSU. In that case, the parties must clearly define the issues referred to arbitration and agree on the particular procedure to be followed. The parties must also agree to abide by the arbitration award. Pursuant to Article 3.5 of the DSU, the arbitration award must be consistent with the covered agreements. In the latter part of 2001, WTO Members used the Article 25 arbitration procedure for the first time.

The WTO dispute settlement system also provides, pursuant Article 5 of the DSU, for the possibility for the parties to a dispute — if they all agree to do so — to use good offices, conciliation or mediation to settle a dispute. To date, no use has been made of the dispute settlement methods provided for in Article 5 but in 2001 the Director-General reminded Members of his availability to help to settle disputes through good offices.

INSTITUTIONS OF WTO DISPUTE SETTLEMENT

Among the institutions involved in WTO dispute settlement, there is a distinction between the political institutions of the WTO and, in particular, the Dispute Settlement Body, and independent, judicial-type institutions such as ad-hoc dispute settlement panels and the standing Appellate Body. While the WTO has entrusted the adjudication of disputes to panels at the first instance level and the Appellate Body at the appellate level, the Dispute Settlement Body continues to play an active role in the WTO dispute settlement system. The Dispute Settlement Body, or DSB, is an alter ego of the General Council of the WTO. The General Council convenes as the DSB to administer the rules and procedures of the DSU.

Article 2.1 of the DSU states: "the DSB shall have the authority to establish panels, adopt panel and Appellate Body reports, maintain surveillance of implementation of rulings and recommendations, and authorize suspension of concessions and other obligations under the covered agreements."

Article 2.4 of the DSU stipulates that where the DSU provides for the DSB to take a decision, such a decision is always taken by consensus. It is important to note, however, that for most key decisions, such as the decision on the establishment of a panel, the adoption of panel and Appellate Body reports and the authorization of suspension of concessions and other obligations, the consensus requirement is in fact a "reverse" or "negative" consensus requirement. The "reverse" consensus requirement means that the DSB is deemed to take a decision unless there is a consensus among WTO Members not to take the decision. Since there will usually be at least one Member with a strong interest in that the DSB takes the decision to establish a panel, to adopt the panel and/or Appellate Body reports or to authorize the suspension of concessions, it is very unlikely that there will be a consensus not to adopt these decisions. As a result, decision-making by the DSB on these matters is, for all practical purposes, automatic. Furthermore, it should be noted that the DSU provides for strict "timeframes" within which decisions on these matters need to be taken.

The DSB meets as often as necessary to carry out these functions within the time frames provided in the DSU. In practice, the DSB has one regularly scheduled meeting per month and, in addition, a number of special meetings are convened when the need for a meeting arises.

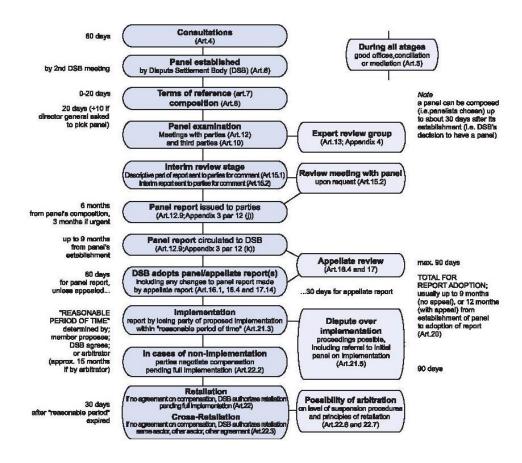
At the request of a complaining party, the DSB will establish a panel to hear and decide a dispute. The DSB will do so by reverse consensus. The establishment of a panel is therefore "automatic". As a rule, panels consist of three persons, who are not nationals of the Members involved in the dispute. These persons are often trade diplomats or government officials but also academics and practising lawyers regularly serve as panellists. The terms of reference of the panel are determined by the request for the establishment of a panel, which identifies the measure at issue and the provisions of the covered agreements allegedly breached. It is the task of panels to make an objective assessment of the matter, including an objective assessment of the facts of the case and the applicability of and conformity with the relevant covered agreements.

The Appellate Body hears appeals from the reports of dispute settlement panels. Unlike panels, the Appellate Body is a permanent, standing international tribunal. It is composed of seven persons, referred to as Members of the Appellate Body. Members of the Appellate Body are appointed by the DSB for a term of four years, once renewable. Only the complaining or responding party can initiate appellate review proceedings. Appeals are limited to issues of law covered in the panel report or legal interpretations developed by the panel. The Appellate Body may uphold, modify or reverse the legal findings and conclusions of the panel that were appealed.

Apart from the DSB, panels and the Appellate Body, there are a number of other institutions and persons involved in the WTO's efforts to resolve disputes between its Members. These institutions and persons include arbitrators under Articles 21.3, 22.6 or 25 of the DSU, the Textile Monitoring Body under the ATC, the Permanent Group of Experts under the SCM Agreement, Experts and Expert Review Groups under Article 13 of the DSU and Article 11.2 of the SPS Agreement, the Chairman of the DSB and the Director-General of the WTO. Furthermore, the WTO Secretariat and the Secretariat of the Appellate Body play important roles in providing administrative and legal support to panels and the Appellate Body respectively.

WTO DISPUTE SETTLEMENT PROCEEDINGS

The flow-chart below indicates the major steps in the WTO dispute settlement proceedings.



There are four stages in WTO dispute settlement proceedings: (1) consultations; (2) panel proceedings; (3) Appellate Body proceedings; and (4) implementation of the recommendations and rulings.

Consultations

Traditionally, GATT attached significant importance to bilateral consultation, and many disputes actually were settled in this manner. GATT provides for some special consultation and review procedures, such as the one mentioned in Article XIII at paragraph 2 (specifying that a contracting party shall, upon request by another contracting party regarding fees or charges connected with importation/exportation, review the operation of its laws and regulations), as well as in the "1960 GATT decision on arrangements for consultations on restrictive business practices" (specifying that a contracting party shall, upon request by another contracting party regarding the business practice by which international trade competitions would be limited, give sympathetic consideration and provide an adequate opportunity for consultation). However, paragraph 1 of Article XXIII and paragraph 1 of Article XXIII of GATT play the central role in prescribing that "formal" consultation to take place prior to panel procedures.

1) Consultation under Article XXII and Article XXIII, respectively

Regarding the difference between the two provisions, consultation under Article XXII covers any matter affecting the operation of GATT, while the coverage of consultation under Article XXIII is limited to certain matters. Specifically, Article XXIII provides that a contracting party may make representations or proposals to another contracting party if the former party considers that any benefit accruing to it directly or indirectly under GATT is being nullified or impaired or that the attainment of any objective of GATT is being impeded as the result of:

- (a) the failure of another contracting party to carry out its obligations under GATT, or
- (b) the application by another contracting party of any measure, whether or not it conflicts with the provisions of GATT, or
- (c) the existence of any other situation.

Thus, disputes over "nullification or impairment of any benefit otherwise to accrue under GATT" may be brought to consultation under Article XXIII. Another point of difference between the two concepts of consultation is the participation of a third country; it is permitted only with respect to consultations under Article XXII. Similar differences can be seen in the relation between Article XXII and Article XXIII of GATS.

2) Consultation under Article 4 of DSU

The DSU specifies that it adheres to the principles of the management of disputes applied under Articles XXII and XXIII of GATT (paragraph 1, Article 3 of DSU). Article 4 of DSU provides for consultation procedures and rules and specifies that each party should give sympathetic consideration to any representations made by another party and should provide adequate opportunity for consultation. It provides that the parties which enter into consultations should attempt to obtain satisfactory adjustment of the matter concerned.

According to the DSU (paragraph 4, Article 4), a request for consultations shall be effective when such request is submitted in writing, gives reasons for the request, including identification of the measures at issue and an indication of the legal basis for the complaint and is notified to the DSB (Dispute Settlement Body of WTO). It provides that the party to which a request is made shall reply within 10 days after the date of its receipt and shall enter into consultations in good faith within a period of no more than 30 days after the date of receipt of the request, with a view to reaching a mutually satisfactory solution (paragraph 3, Article 4 of DSU).

WTO Members other than the consulting parties are to be informed in writing of requests for consultations, and any Member that has a substantial trade interest in consultations may request to join in the consultations as a third party. It is also provided that the party to which the request for consultations is addressed may reject the said third party's desire to join in the consultations when the party considers that "the claim of substantial trade interest is not well-founded" (paragraph 11, Article 4 of DSU).

Panel procedures

1) Establishing a panel

Paragraph 2, Article XXIII of GATT provides that if no satisfactory adjustment is effected through consultations between the contracting parties concerned, the dispute concerned may be referred to the DSB (Dispute Settlement Body, or "Contracting Parties" under the former GATT) with respect to alleged "nullification or impairment of any benefit otherwise to accrue under GATT" as mentioned above.

In the past, such disputes referred to the Contracting Parties were brought to a working group consisting of the disputing parties and neutral parties. The working group was supposed to confirm claims of the respective disputing parties and discuss them, but was not required to make a legal judgment. The function of the working groups was limited to the facilitation of negotiations and dispute settlement. Later, however, the "panel" procedure was introduced and has become the regular practice. A panel is composed of panelists (see Note) who do not represent a government or any organization, but are supposed to serve in their individual capacities. A panel is principally to make a legal judgment regarding the matters in dispute. Also, the WTO dispute settlement mechanism employs a two-tier appellate system, establishing the Appellate Body. GATT provides that consultations pursuant to paragraph 1 of its Article XXIII should precede the establishment of a panel in accordance with paragraph 2 of Article XXIII, but it was generally accepted that a panel could be established after consultations under Article XXIII even if there had been no consultation under Article XXIII.

The WTO dispute settlement mechanism does not differentiate consultations under Article XXII from those under Article XXIII of GATT. If consultations fail to settle a dispute within 60 days after the date of receipt of a request for consultations, the complaining party may submit a written request to the DSB for the establishment of a panel (paragraph 7, Article 4 of DSU). It is provided that such written request should indicate whether consultations were held, identify the specific measures at issue and provide a brief summary of the legal basis of

the complaint sufficient to present clearly the problem of inconsistency with trade agreements in question (paragraph 2, Article 6 of DSU).

As a rule, decisions of the DSB are made by consensus, but the so-called "negative consensus method" is applied to the issues of "establishment of panels" (paragraph 1 of Article 6), "adoption of reports of a panel or Appellate Body" (paragraph 4 of Article 16 and paragraph 14 of Article 17) and "compensation and the suspension of concessions" (paragraph 6 of Article 22), the requested action is approved unless all participating Member countries present at the DSB meeting unanimously object. As far as the DSB's establishment of a panel is concerned, paragraph 2, Article 6 of DSU specifies that "a panel shall be established at the latest at the DSB meeting following that at which the request first appears as an item on the DSB's agenda, unless at that meeting the DSB decides by consensus not to establish a panel."

Parties other than the complaining party which requested the establishment of a panel are entitled to block the panel establishment but only once (paragraph 1, Article 6 of DSU). This veto is most frequently employed by the respondent. Therefore, in most cases, a panel is established at the second DSB meeting at which the request appears as an item on the DSB's agenda. Any Member that desires to be joined in the panel procedure as a third party because of having a substantial interest in the matter concerned is required to express such desire at the time of the establishment of a panel or within 10 days after the date of the panel establishment.

2) Composition of Panels

Once a panel is established, the next step is to select panelists. Selection of panelists is conducted through proposals by the WTO Secretariat on panelists (paragraph 6, Article 8 of DSU). Generally, the Secretariat summons the disputing parties and hears their opinions concerning desirable criteria for selecting panelists, such as home country, work experience and expertise.

Then, the Secretariat prepares a list of nominees (generally six persons) providing their names and brief personal record, and show the list to both parties. It is provided that citizens of the disputing parties or third parties joined in the panel procedure may not serve on a panel concerned with that dispute, unless the parties to the dispute agree otherwise (paragraph 3, Article 8 of DSU).

It is also provided that either disputing party "shall not oppose nominations except for compelling reasons" (paragraph 7, Article 8 of DSU). However, since the definition of a compelling reason is not very strict, frequently nominations made by the WTO Secretariat are not accepted by either party, and sometimes this happens several times. Also, it is provided that if there is no agreement on the panelists within 20 days after the date of the establishment of a panel, the Director-General, upon request of either party, shall determine the composition of the panel after consulting with the parties to the dispute (paragraph 7, Article 8 of DSU).

3) Making written submissions

After the composition of a panel is determined, the panel meets to determine the timetable for the panel process and the working procedures it will follow throughout the dispute. Then, after three to six weeks from the establishment of the panel, the complainant provides the panel a written submission containing all facts relating to the issue concerned and its claims. The respondent also provides a written submission to the panel in two to three weeks after the receipt of the complainant's written submission (paragraph 12 of Appendix 3 of DSU). Although there is no rule specifying the composition of a written submission, in many cases they are composed of five parts: 1) introduction; 2) facts behind the complaint; 3) procedural points at issue; 4) claims based on legal grounds; and 5) conclusion.

Regarding the disclosure of the written submissions, it is provided (in paragraph 3, Appendix 3 of DSU) that "deliberations of a panel and documents submitted to it shall be kept confidential. Nothing in the DSU shall preclude a party to a dispute from disclosing statements of its own positions to the public." Thus, disputing parties may disclose their own written submissions to the public. Actually, the United States and EU disclose many of their written submissions to the public, and Japan also releases some of its written submissions to the public on websites.

4) Panel meeting

A panel generally meets two times. Meetings of a panel are held in the WTO building, instead of a special facility such as a court. Traditionally, a panel meets in closed session, just like other meetings of WTO. Generally, panel meetings last one to three days.

The first meeting of a panel is supposed to be held in one to two weeks after the receipt of the written submission submitted by the respondent (paragraph 12, Appendix 3 of DSU). This first substantive meeting is to begin with a briefing made by the chairman of the panel on how to proceed with the meeting. Then, the compalinant and the respondent, respectively, give oral statements regarding their own written submissions. This is followed by questioning by the panel and in some cases a question-and-answer session between the disputing parties. Next, a third party session is held, where oral statements and a question-and-answer session occurs. As a rule, the presence of third parties is permitted only at these third party sessions, and third parties may not be present at substantive meetings. The second substantive meeting of a panel is supposed to be held after two to three months since the first substantive meeting.

The second meeting focuses mainly on counter-arguments against claims of the other party made during the first substantive meeting. Unlike the first substantive meeting, third parties are not permitted to attend the second substantive meeting. Unless otherwise agreed between the disputing parties, third parties may not make written submissions or obtain written submissions submitted by the disputing parties.

5) Interim report

Following the second substantive meeting, the panel issues an interim report to the disputing parties. The interim report describes the findings and conclusions of the panel. An interim report provides the first opportunity for disputing parties to tell whether their arguments are supported by the panel or not. Disputing parties are entitled to submit comments or submit a request for the panel to review and correct technical aspects of the interim report for correction.

6) Final panel report

The DSU provides (in paragraph 9 of its Article 12) that the period in which the panel conducts its examination, from the date that the composition and terms of reference of the panel have been agreed upon until the date the final report is issued to the disputing parties, "shall not exceed six months as a general rule." When the panel considers that it cannot issue its report within six months, it is supposed to inform the DSB in writing of the reasons for the delay together with an estimate of the period within which it will issue its report (paragraph 9, Article 12 of DSU). The recent trend is that cases requiring an examination period exceeding six months are increasing because of the difficulty in confirming facts due to the existence of a highly technical matter or difficult interpretations of a legal matter at issue.

Generally, a final panel report is issued shortly after the disputing parties comment on the interim report, first to disputing parties and then to all Members in the three official languages of the WTO (English, French and Spanish).

A panel report contains, in its conclusion, the judgment reached by the panel as well as recommendations regarding correction of the measures in question. This conclusion is referred to the DSB, where the "negative consensus method" is applied for the adoption of the panel report. The DSB adopts the "recommendation and rulings", which are legally binding the parties concerned. Adoption of a panel report is supposed to be completed between 21 and 60 days after the date the report has been circulated to the Members (paragraphs 1 and 4 of Article 16 of DSU).

Appeal (review by the Appellate Body)

If there is an objection to a panel report, disputing parties may request the Appellate Body to examine the appropriateness of the legal interpretations employed by the panel (paragraph 4, Article 17 of DSU). The Appellate Body is a standing group composed of seven persons of recognized authority with demonstrated expertise in law, international trade and the subject matter of the covered agreements generally; the Appellate Body membership is broadly representative of membership in the WTO. Three persons out of the seven Appellate Body members are to serve on any one case. Persons serving on the Appellate Body are selected by a consensus of all Members at the DSB and serve for a four-year term. Each person may be reappointed once (paragraph 2, Article 17 of DSU).

A Notice of Appeal should be filed no later than the DSB meeting at which a panel report is scheduled to be adopted. Since it is provided that the adoption of a panel report should be

completed within 60 days after the date of circulation of the panel report to the Members, an appeal is supposed to be made within 60 days after the date of circulation (paragraph 4, Article 16 of DSU).

It is provided (in paragraph 6 of Article 17 of DSU) that an appeal should be limited to issues of law covered in the panel report and legal interpretations developed by the panel. In principle, factual findings of a panel may not be challenged. Regarding legal interpretations and findings, there is a precedent that mentions: "To determine whether a certain incident occurred at a certain place/time is a matter of fact typically. However, to determine whether a certain fact or a series of facts complies with any given rule of a certain convention is a matter of law and requires legal interpretation." (EC-Hormone-Treated Beef Case (DS26))

After the filing of a Notice of Appeal, the Appellate Body shows the timetable for set out in its working procedures. The three major steps in the procedures are: (1) filing of a written submission by the appellant; (2) filing of written submissions by the appellee and third participants, respectively; and (3) meeting of the Appellate Body with the parties (oral hearing). It is provided that the appellant's filing of its written submission should shall be made within 7 days after the filing of a Notice of Appeal, that the appellee's filing of its written submission should be made within 25 days after the date of the filing of a Notice of Appeal, and that the meeting of the Appellate Body (oral hearing) is supposed to be held between 35 and 45 days after the date of the filing of a Notice of Appeal (paragraphs 21, 22, 24 and 27 of Working Procedures for Appellate Review "WT/AB/WP/5" issued on January 4, 2005). It is also provided that the participation of a third party in appellate review procedures may be accepted only if such party was joined in the panel procedure (paragraph 4, Article 17 of DSU). Third party participants may file written submissions and also may be present at the meeting of the Appellate Body.

During a meeting of the Appellate Body (1) the appellant, (2) the appellee and (3) third participant(s), respectively, make oral arguments in the order mentioned. This is followed by questioning by the Appellate Body of the disputing parties as well as of third party participants; and each party is required to address the questions. The Appellate Body takes the initiative in questioning, and either disputing party is generally not allowed to ask a question to the other party. In general, following the question-and-answer session, disputing parties and third party participants are provided with the opportunity to make oral statements again at the end of the meeting.

Following the meeting, the Appellate Body is to circulate its report to the Members within 60 days after the date of filing of a Notice of Appeal. The proceedings should not exceed 90 days in any case (paragraph 5, Article 17 of DSU). Unlike panel procedures, there is no rule concerning an interim report for appellate review procedures.

Adoption of reports

A report prepared by the panel or the Appellate Body following the review process becomes the formal written recommendations of the DSB when adopted by the DSB. Regarding the adoption of panel reports, the DSU provides (in paragraph 1, Article 16) that "In order to provide sufficient time for the Members to consider panel reports, the reports shall not be considered for adoption by the DSB until 20 days after the date on which they have been circulated to the Members." It is also provided (in paragraph 4, Article 16 of DSU) that "within 60 days after the date of circulation of a panel report to the Members, the report shall be adopted at a DSB meeting." Regarding the adoption of reports of the Appellate Body, the DSU provides (in paragraph 14, Article 17) that "a report shall be adopted within 30 days after the date of circulation of the report to the Members." Together with a panel report, a report of the Appellate Body becomes the official written recommendations and rulings of the DSB once it is adopted at a DSB meeting.

Implementation of recommendations

The DSU provides that at a DSB meeting held within 30 days after the date of adoption of the panel or Appellate Body report, the Member to which the recommendations are directed is supposed to express its intentions with respect to implementation of the recommendations mentioned in the report. If it is impracticable to comply immediately with the recommendations, the Member is given a reasonable period of time to do so. Such reasonable period of time may be decided by mutual agreement between the disputing parties concerned. However, in the absence of such mutual agreement, the parties may refer the decision to arbitration.

In principle, an arbitrator usually is one of the three Appellate Body members who conducted the appellate review of the case concerned. The mandate of the arbitrator is to determine the "reasonable period of time" within 90 days after the date of the adoption of report. It is provided (in paragraph 3, Article 21 of DSU) that the reasonable period of time to implement the recommendations mentioned in a panel or Appellate Body report should, as a general rule, not exceed 15 months from the date of adoption of the report. It is also provided that the DSB should keep under surveillance the implementation of adopted recommendations and that the Member concerned should provide, after a certain period of time following the date of establishment of the reasonable period of time, the DSB with a status report in writing of its progress in the implementation of the recommendations until the issue of implementation is resolved (paragraph 6, Article 21 of DSU).

In general, a panel or the Appellate Body recommends that the Member concerned bring a measure determined to be inconsistent with a covered agreement into conformity with that agreement. It does not usually give any specific instruction on how to implement the recommendations. Therefore, it is not unusual that disagreement arises between disputing parties as to the existence or consistency with the WTO Agreement of measures taken to comply with the recommendations. In this respect, the DSU provides (in paragraph 5, Article 21) that "such disagreement as to the existence or consistency with a covered agreement of measures taken to comply with adopted recommendations or rulings" may be referred to a panel.

Such panel established for the purpose of determining whether there has been implementation of adopted recommendations or rulings ("compliance panel") is supposed to be composed of

those panelists who served on the original panel. The panel is required to issue a report within 90 days after the date when disagreement is referred to the panel. Unlike regular panel procedures, establishment of the compliance panel does not have to be preceded by consultations. Generally, such panels meet only once. When the complaining party doubts that there has been appropriate implementation of adopted recommendations or rulings, it may request review by a compliance panel repeatedly without limitation. In addition, there is a precedent that compliance panel decisions may be appealed to the Appellate Body for review, although DSU does not have any provision providing for such process.

Countermeasures

With the approval of the DSB, the complainant may take countermeasures, such as suspension of concessions, against the party who respondent's interests also in cases where it fails to implement the recommendations adopted by the DSB within a given reasonable period of time, provided that no agreement on compensation is reached between both parties. Specifically, it is provided that the complainant may request the DSB to suspend the application, to the Member concerned, of concessions or other obligations under covered agreements ("countermeasures") when such Member fails to bring the measures found to be inconsistent with a covered agreement into compliance therewith within the said "reasonable period of time" or that a panel or the Appellate Body confirms a failure of such member to fully implement adopted recommendations (paragraph 2, Article 22 of DSU).

There are rules as to the sectors and level of countermeasures to be taken. For instance, it is provided (by Article 22 of DSU) that the complainant, when taking countermeasures, should first seek to target sector(s) that are the same as that to which the dispute concerned is associated, and also that the level of countermeasures should be equivalent to the level of the "nullification or impairment" caused. If the complainant considers that it is not practicable or effective to suspend concessions or other obligations with respect to the same sector(s), it may seek to suspend concessions or other obligations in other sectors under the same agreement (item (b), paragraph 3, Article 22 of DSU).

In addition, if that party considers that it is not practical or effective to suspend concessions or other obligations with respect to other sectors under the same agreement, and that the circumstances are serious enough, it may seek to suspend concessions or other obligations under another covered agreement (item (c), paragraph 3, Article 22 of DSU). The latter practice is called "cross retaliation," and it can be represented by a case where retaliation for a violation of TRIPS (Agreement on Trade-Related Aspects of Intellectual Property Rights) involves the suspension of customs-related concessions under GATT. Such cross retaliation is one of the unique measures employed in the WTO dispute settlement mechanism, and was introduced as a result of the coverage of the WTO Agreement over not only goods but also services and intellectual property rights (However, GPA sets special provisions on prohibition of "cross retaliation." Paragraph 7, Article 22 stipulates that "any dispute arising under any Agreement ...other than this Agreement shall not result in the suspension of concessions or other obligations under this Agreement, and any dispute arising under this

Agreement shall not result in the suspension of concessions or other obligations under any other Agreement.").

In the case that the respondent objects to the contents or level of the countermeasures for which the complainant requested authorization, the matter may be referred to arbitration (paragraph 6, Article 22 of DSU). When arbitration is conducted, the resulting decision is taken into consideration for the authorization of countermeasures. The negative consensus method is applied to finalize the authorization of the DSB (paragraph 7, Article 22 of DSU).

Time-frame for the Proceedings

One of the most striking features of the WTO dispute settlement system is the short time frames within which the proceedings of both panels and the Appellate Body must be completed. The period in which a panel shall conduct its examination, from the date that the composition and terms of reference of the panel have been agreed upon until the date the final report is issued to the parties to the dispute, shall, as a general rule, not exceed six months.

When a panel considers that it cannot issue its report within six months, it shall inform the DSB in writing of the reasons for the delay together with an estimate of the period within with it shall issue its report. In no case should the period from the establishment of the panel to the circulation of the report to the Members exceed nine months. Much shorter still is the time frame within which a panel has to rule on the WTO-consistency of measures taken to comply with the recommendations and rulings under Article 21.5 of the DSU. In such proceedings, the panel must circulate its report within 90 days after the date of referral of the matter to it.

With regard to the Appellate Body proceedings, the DSU provides that, as a general rule, the proceedings shall not exceed 60 days from the date a party to the dispute formally notifies its decision to appeal to the date the Appellate Body circulates its report. When the Appellate Body believes that it cannot render its report within 60 days, it shall inform the DSB in writing of the reasons for the delay together with an estimate of the period within which it will submit its report. In no case shall the proceedings exceed 90 days.

No other international court or tribunal operates under such severe time limits. These time limits, and in particular the time limits for the Appellate Body, have been criticized as excessively short and too demanding for both the parties to the dispute and the Appellate Body. As a result of these time limits, however, there is no backlog of cases either at the panel or appellate level. While panels frequently go beyond the time limits imposed on them by the DSU, the Appellate Body has thus far been able to complete all but four appeals within the maximum period of 90 days.

Confidentiality of the Proceedings

The WTO dispute settlement proceedings are also characterized by their confidentiality. Consultations, panel proceedings and appellate review proceedings are all confidential. Meetings of the DSB and panels and the oral hearing of the Appellate Body take place behind closed doors. All written submissions to a panel or to the Appellate Body by the parties and

third parties to the dispute are confidential. Parties may make their own submissions available to the public. While a few Members do so in a systematic manner (e.g., the United States), most parties choose to keep their submissions confidential. The DSU provides that a party to a dispute must, upon request of any WTO Member, provide a non-confidential summary of the information contained in its submissions to the panel that could be disclosed to the public. However, this provision does not provide for a deadline by which such non-confidential summary must be made available and is, therefore, not very effective.

The interim report of the panel and the final panel report as long as it is only issued to the parties to the dispute are also confidential. The final panel report only becomes a public document when it is circulated to all WTO Members. In reality, however, the interim report and the final report issued to the parties do not remain confidential very long and are usually "leaked" to the media. Unlike panel reports, Appellate Body reports are not first issued to the parties and then, weeks later, circulated to all WTO Members. In principle they are issued to the parties and circulated to all WTO Members at the same time and are as of that moment a public document.

REMEDIES FOR BREACH OF WTO LAW

What can or should be done if a panel and/or the Appellate Body conclude that a measure is inconsistent with WTO law?

Article 3.7 of the DSU states: "In the absence of a mutually agreed solution, the first objective of the dispute settlement mechanism is usually to secure the withdrawal of the measures concerned if these are found to be inconsistent with the provisions of any of the covered agreements. The provision of compensation should be resorted to only if the immediate withdrawal of the measure is impracticable and as a temporary measure pending the withdrawal of the measure, which is inconsistent with a covered agreement. The last resort which this Understanding provides to the Member invoking the dispute settlement procedures is the possibility of suspending the application of concessions or other obligations under the covered agreements on a discriminatory basis vis-à-vis the other Member, subject to authorization by the DSB of such measures."

Article 19.1 of the DSU provides: "Where a panel or the Appellate Body concludes that a measure is inconsistent with a covered agreement, it shall recommend that the Member concerned bring the measure into conformity with that agreement. In addition to its recommendations, the panel or Appellate Body may suggest ways in which the Member concerned could implement the recommendations."

Article 21.1 of the DSU adds to this: "Prompt compliance with recommendations or rulings of the DSB is essential in order to ensure effective resolution of disputes to the benefit of all Members."

However, if it is impracticable to comply immediately with the recommendations and rulings of the DSB, the Member concerned shall have a reasonable period of time in which to do so. This reasonable period of time can either be agreed upon by the parties or be determined

through binding arbitration. In those cases in which the reasonable period of time for implementation has been determined through arbitration, it has been set between six months and 15 months and one week.

With respect to compensation (for future damages) and retaliation in case of non-compliance, Article 22.1 states: "Compensation and the suspension of concessions or other obligations are temporary measures available in the event that the recommendations and rulings are not implemented within a reasonable period of time. However, neither compensation nor the suspension of concessions or other obligations is preferred to full implementation of a recommendation to bring a measure into conformity with the covered agreements." The DSU does not explicitly provide for the compensation of damage suffered.

DEVELOPING COUNTRY MEMBERS AND DISPUTE SETTLEMENT SYSTEM

Use Made of the Dispute Settlement System

The WTO dispute settlement system has been used intensively by the major trading powers, and, in particular, the United States and the European Communities. Developing country Members, however, have also had frequent recourse to the WTO dispute settlement system, both to challenge trade measures of major trading powers and to settle trade disputes with other developing countries. During the first six years of the WTO dispute settlement system (1995-2000) in 26 per cent of all cases brought to the WTO system for resolution developing countries were complainants and in 40 per cent they were respondents. In 2000 and 2001, developing countries brought more disputes to the WTO system than did developed countries. The most active users of the dispute settlement system among developing country Members are Brazil, India, Mexico, Thailand and Chile. To date, no least-developed country has ever brought a complaint to the WTO or has been a respondent in WTO dispute settlement proceedings.

Special and Differential Treatment

The DSU recognizes the special situation of developing and least-developed country Members. There are a number of DSU provisions that grant special rights to developing countries in the consultation and panel processes. Special rules for developing country Members are found in Article 3.12, Article 4.10, Article 8.10, Article 12.10, Article 12.11, Article 24 and Article 27 of the DSU. For the most part, these special rules and procedures have not been much used to date.

Legal Assistance

The WTO Secretariat assists all Members in respect of dispute settlement when they so request. However, the DSU recognizes that there may be a need to provide additional legal advice and assistance to developing country Members. To meet that additional need, Article 27.2 of the DSU requires the WTO Secretariat to make available qualified legal experts to help any developing country Member which so requests. The extent to which the Secretariat can assist developing country Members is, however, limited both by lack of manpower and by the requirement that the Secretariat's experts should give assistance in a manner "ensuring

the continued impartiality of the Secretariat". The experts can thus not act on behalf of a developing country Member in a dispute with another Member and their assistance is necessarily limited to the preliminary phases of a dispute.

Effective legal assistance to developing country Members in dispute settlement proceedings is given by the newly established, Geneva-based Advisory Centre on WTO Law. At the occasion of the official opening of the Advisory Centre on WTO Law on 5 October 2001, Mr. Mike Moore, the then WTO Director-General, said that with the establishment of the Advisory Centre for "the first time a true legal aid centre has been established within the international legal system, with a view to combating the unequal possibilities of access to international justice as between States".

The Advisory Centre is an independent intergovernmental organization (fully independent from the WTO), which will function essentially as a law office specialized in WTO law, providing legal services and training exclusively to developing country and economy-intransition Members of the Advisory Centre and all least-developed countries. The Centre will provide support at all stages of WTO dispute settlement proceedings at discounted rates for its developing country Members and all least-developed countries. The current 32 Members (nine developed countries, 22 developing countries and one economy-in-transition) have pledged in total US\$ 9.8 million for the endowment fund and US\$6 million for the multi-year contributions. In the summer of 2001, the Advisory Centre assisted for the first time a WTO developing country Member in a dispute settlement procedure when it assisted Pakistan in the Appellate Body proceedings in United States – Cotton Yarn.

<u>NEGOTIATIONS ON THE DISPUTE SETTLEMENT SYSTEM</u>

At the time of adoption of the WTO Agreement, it was agreed that the WTO Ministerial Conference would complete a full review of the DSU within four years after the entry into force of the WTO Agreement, and subsequently take a decision on whether to continue, modify or terminate the DSU. In the context of this review of the DSU, which took place in 1998 and 1999, Members made a large number of proposals and suggestions for further improvement of the dispute settlement system. In the run-up to and during the Seattle Session of the Ministerial Conference in December 1999, Members made a considerable but eventually unsuccessful effort to agree on modifications to be made to the DSU.

In 2000 and 2001, informal efforts outside the DSB to reach agreement on DSU amendments were continued. Also these efforts, intensified in the run-up to the Doha Session of the Ministerial Conference in November 2001, did not lead to an agreement. At the Doha Session of the Ministerial Conference, it was agreed, however, to open in January 2002 formal negotiations with the aim of concluding by May 2003 an agreement on changes to the DSU. The negotiations are based on the work done so far and on new proposals by Members. The Ministerial Declaration states that the negotiations on the Dispute Settlement Understanding will not be part of the single undertaking — i.e. that they will not be tied to the overall success or failure of the other negotiations mandated by the Ministerial Declaration.

Among the proposals for reform currently under negotiation, there is a proposal to introduce a system of permanent panelists, proposals regarding the composition and mandate of the Appellate Body, proposals concerning the transparency of the proceedings, proposals concerning the special and differential treatment for developing country Members and proposals to improve the WTO mechanism to ensure implementation of recommendations and rulings adopted by the DSB.

IMPORTANT CASES RELATING TO TELECOM SERVICES

A. EC-Japan- Measures Affecting the Purchase of Telecommunications Equipment (1995) (DS15)

This is the first case on telecommunication under the WTO. The EC, the applicant, argued that the Agreement concluded between Japan and the US concerning the telecommunication equipment was a violation of GATT Article I:1, III:4 (the non-discrimination Treatment) and XVII:1 (c) (the state Trading Enterprise). The EC also argued that the Agreement has nullified and impaired the benefit of the EC.

The case has never reached the Panel. No official report concerning the status of the case has ever been published. The WTO however indicated that the dispute has been settled bilaterally. In this respect, the solution by way of consultation has been reached between the parties.

B. EC-Korea- Laws, Regulations and Practices in the Telecommunications Procurement Sector (1996) (DS40)

The EC brought this case to the DSB. The request for consultation related to the Korean Law, Regulations and Practice in the telecommunications sector.

The EC in its request argued that the Korean's procurement requirement in the telecommunications sector violated the non-discrimination obligation especially towards the foreign suppliers.

The EC also argued that the Korean practice has given a better and favourable treatment to the US supplier under the bilateral agreement between Korea and the US. The articles that have been allegedly violated were similar with the alleged violation of provisions of the GATT articles under the EC-Japan case (1996) (DS15), namely Articles I and III and Article XVII.

The dispute has been settled amicably between the parties under Article 3.6 of the DSU. The EU and Korea notified the WTO Secretariat about the settlement on 22 October 1997.

C. US-Belgium- Measures Affecting Commercial Telephone Directory Services (1997) (DS80)

The US brought this case against the Kingdom of Belgium. The request for consultation with Belgium was made on 2 May 1997 concerning Belgium's certain measures of the provision of commercial telephone directory services.

The US argued that Belgium's law and policies that imposed conditions for obtaining a license to publish commercial directories was a violation of the GATS (General Agreement on Trade in Services).

In additions, the US also maintained that the Belgium's policies with respect to telephone directory services was a violation of the GATS. The alleged violations of the GATS agreement included Articles II (Most-Favoured Nation Treatment), VI domestic regulation, VIII (Monopolies and exclusive service suppliers) and XVII (national treatment).

The US also claimed that the Belgium laws and policies had nullified and impaired the benefit accruing to the US under the specific GATS commitment made by the EC on behalf of the Belgium.

There was however no news concerning the status of the case. The two parties did not notify the WTO Secretariat concerning the progress of the consultation.

D. Korea-United States- Anti-Dumping duties on Imports of Colour Television Receivers from Korea (1997) (DS89)

Korea brought this case to the WTO on 10 July 1997. Korea's main complain was that the US's measure in telecommunication sector was a violation of the GATT. In this respect, the US imposed anti-dumping duties on imports of colour television receivers (CTVs) from Korea, despite the non-existence of dumping and cessation of exports from Korea. In addition, korea argued that there was no effort on the part of the US to examine the continuance of imposing the duties.

The GATT articles the Korea argued had been breached by the US's measures were Articles VI.1 and VI.6(a) of GATT 1994, and Articles 1,2,3.1,3.2,3.6,4.1,5.4,5.8,5.10,11.1 and 11.2 of the Anti-Dumping Agreement.

When the bilateral consultations of the two countries resulted failed, on 6 November 1997, Korea requested the establishment of a Panel. However on 5 January 1998, Korea notified the DSB that it pulled out its request for a Panel and later on at the DSB meeting on 22 September 1998, Korea informed the DSB that it was definitively withdrawing the request for a Panel because the imposition of anti-dumping duties had been revoked.

E. US-Mexico- Telecoms Services (2000) (DS204)

This case concerned with the United State's complaint on the Mexico's policy, in particular its domestic law and regulation on telecommunication sector, especially which govern the

supply of telecommunication services. The Mexico's policy on this sector has been disputed by the US.

Prior to 1997, Telefonos de Mexico, S.A.de C.V. (Telemex) controlled the long-distance and international telecommunications services in Mexico. Since that date, Mexico has authorized multiple Mexican carriers to provide international services over their networks.

Under Mexican laws, the largest carrier of outgoing calls to a particular international market, has the exclusive right to determine on the basis of negotiation, the terms and conditions for the termination of international calls in Mexico. The terms and conditions apply to any carrier between Mexico and that international market.

Currently, there are 27 carriers allowed to provide long distance services, including two US-affiliated carriers-Alestra (AT/T) and Avantel (Worldcom). Telemex remains the largest supplier of basic telecommunications services in Mexico, including international outbound traffic.

On 17 August 2000, the US requested consultations with Mexico concerning Mexico's commitments and obligations on basic and value added telecommunication services under the GATS. The US especially argued that Mexico has practice anti-competitive and discriminatory regulatory measures and tolerated certain privately-established market access barriers. The US also maintained that Mexico has failed to take-needed regulatory action in Mexico's basic and value-added telecommunications sector.

The Measures that Mexico implemented did not accord with Mexico's GATS commitments and obligations, in particular Articles VI, XVI and XVII; Mexico's additional commitments under Article XVIII as incorporated in the Reference Paper inscribed in Mexico's Schedule of Specific Commitments and the GATS Annex on Telecommunications, including Sections 4 and 5.

The US alleged that Mexico's measures had:

- i. failed to ensure that Telemex provides interconnection to US cross-border basic telecom suppliers on reasonable rates, terms and conditions;
- ii. failed to ensure US basic telecom suppliers reasonable and non-discriminatory access to and use of public telecom networks and services;
- iii. did not provide national treatment to US-owned commercial agencies; and
- iv. did not prevent Telemex from engaging in anti-competitive practices.

The consultation took place on 10 October 2000 but both parties did not reach a satisfactory resolution. The consultation was later continued on 16 January 2001. This negotiation, again, both parties failed a solution acceptable to both parties. With this deadlock the US requested the establishment of a Panel.

The DSB established a panel at its meeting on 17 April 2002. The third parties that reserved their rights to participate in the case included Canada, Cuba, the EC, Gautemala, Japan and Nicaragua and followed with India, Honduras, Australia, Brazil.

After hearing both parties and the interested third parties, the Panel ruled that Mexico violated its GATS commitments. The Panel found that:

(i) Mexico failed to ensure interconnection at cost-oriented rates for the cross-border supply of facilities based basic telecom services, in breach of Article 2.2(b) of its Reference Paper.

Mexico failed to maintain appropriate measures to prevent anti-competitive practices by firms that are a major telecom supplier, contrary to Article1.1 of its Reference Paper.

Mexico failed to ensure reasonable and non-discriminatory access to and use of telecommunications networks, contrary to Article 5(a) and (b) of the GATS Annex on Telecommunications.

However, with regard to the cross-border telecom services supplied on a non-facilities basis in Mexico, the Panel ruled that Mexico did not violate its obligations because it had not violate its obligations because it had not taken commitments for these services.

International Trade in Goods and Services in India: Overview

India's economic growth levels have been lower in 2020 primarily due to the effects of the 2019 novel coronavirus disease (COVID-19) pandemic. The *UN World Economic Situation and Prospects 2021 report* states that India's economy shrank by 9.6% in 2020. In response to the effects of the pandemic, the Prime Minister of India announced the launch of the Self-reliant India Campaign (*Atmanirbhar Bharat Abhiyaan*) on 12 May 2020, which is a special economic and comprehensive package of INR20 billion (equivalent to 10% of India's GDP). In keeping with this, the Government's Budget 2021 includes various stimulus and incentive schemes that aim to revive growth. There is an increased focus on indigenisation with a view of making India a global manufacturing hub and increasing its competitiveness globally. Hopes for a turnaround also rest largely on exports picking up. For more information on Aatmanirbhar Bharat Abhiyaan, see: *Aatmanir bharbharat*.

The increased focus on self-reliance has led to the adoption of certain measures to promote the growth of the domestic industry against imports. These include:

- The use of trade remedy measures against unfair trade practices.
- The implementation of mandatory standards set by the Bureau of Indian Standards.
- Restrictions on public procurement in favour of local suppliers.
- Import licensing requirements for a large number of products, including tyres and pulses.

In addition, heightened political tensions with China have had an impact on supply chains, with the government banning certain Chinese apps, introducing restrictions on public procurement from China, and pursuing trade remedial action against Chinese producers.

Indian export incentives, which faced a major hit in 2019 following the WTO dispute in *India* – *Export Related Measures (DS541)*, are also expected to be reformed in the upcoming Foreign Trade Policy (FTP), which is released every five years. The current FTP for 2015-2020 has however been further extended until 30 September 2021. It is expected that the new FTP to be released in September 2021 will work to address infrastructure bottlenecks, increase simplification of taxation procedures, along with elaborating on WTO compliant

incentive schemes. To this end, the government has already announced the Remission of Duties or Taxes on Export Products (RoDTEP) scheme, effective 1 January 2021, the rates for which are due to be announced in the end of May 2021. Further details are likely to be elaborated in the new FTP.

India has also been implementing measures to attract foreign direct investment (FDI). The FDI limit applicable in sectors such as insurance has been further liberalised and there has been consistent growth in FDI, with India attracting total FDI of USD67.54 billion during April-December 2020. The COVID-19 pandemic has forced multinational companies to reexamine their supply chains and de-risk them by reducing their dependence on specific countries. The Government of India seeks to use this as an opportunity to attract investments in its manufacturing sector. In the aftermath of the border disputes between India and China in 2020, India amended its FDI Policy and any investment from a country with which India shares a land border now requires Government approval. It is expected that efforts to attract investment and bolster manufacturing in India will continue in the coming years.

WTO Disputes:

India is currently engaged in a number of WTO disputes. Some of the disputes against India include:

- Dispute on tariff treatment on certain goods in the information and communications technology sector initiated by the EU (*DS582*). Consultations were requested by the EU on 2 April 2019 and a panel was composed on 29 June 2020.
- Dispute on certain measures implemented by India on imports of iron and steel products initiated by Japan (*DS518*). The panel report was issued on 6 November 2018. On 14 December 2018, India notified its decision to appeal.
- Disputes on measures concerning sugar and sugarcane initiated by Guatemala, Australia and Brazil (*DS579*). A panel was composed on 28 October 2019.
- Dispute on tariff treatment on certain goods initiated by Japan (*DS584*). Consultations were requested by Japan on 10 May 2019 and a panel was composed on 7 October 2020.
- Dispute on tariff treatment on certain goods in the information and communications technology sector initiated by Chinese Taipei (*DS588*). Consultations were requested by Chinese Taipei on 2 September 2019 and a panel was composed on 31 August 2020.
- Dispute on certain export measures initiated by the US (*DS541*). The panel was composed in July 2018 and a panel report was circulated on 31 October 2019. On 19 November 2019, India notified its decision to appeal the panel report. The appeal is currently pending before the defunct Appellate Body.
- Dispute on India's imposition of additional duties with respect to certain products originating in the US (*DS585*). On 3 July 2019, the US requested consultations and a panel was composed on 7 January 2020.

Some of the disputes brought by India include:

• Dispute on origin-based preference in the renewable energy market of seven US states (*DS510*). The panel was composed in April 2018 and the panel report was issued on

- 27 June 2019. On 15 August 2019, the US notified its decision to appeal the panel report.
- Dispute on the imposition of countervailing duties by the US against certain hot-rolled carbon steel flat products from India (*DS436*). On 15 November 2019, the compliance panel report was issued. On 18 December 2019, the US notified the Dispute Settlement Body of its decision to appeal the report of the compliance panel.
- Dispute on certain measures imposed by the US to allegedly adjust imports of steel and aluminium into the US (*DS547*). A panel was composed on 25 January 2019.

On 30 April 2020, , the Multi-party Interim Appeal Arbitration Arrangement (MPIA) was officially notified to the WTO and entered into force. The MPIA is created under Article 25 of the WTO Dispute Settlement Understanding (DSU), which provides for arbitrations within the framework of the overall WTO dispute settlement system. India has decided not to join the MPIA.

CHALLENGES TO MODERN METHODS OF DISPUTE RESOLUTION WITH RESPECT TO OUTER SPACE ACTIVITIES

A dispute has been defined by the PCIJ (1924, p. 11) as "a disagreement on a point of law or fact, a conflict of legal views or of interests between two persons" whereas the ICJ (1950, p. 74) has equated it to "a situation in which the two sides held clearly opposite views concerning the question of the performance or non-performance of certain treaty obligations". The author of this article lends preference to the former definition, with the necessary clarification however that persons should of course be interpreted as parties, thereby including not only natural but legal persons, states, inter-governmental organizations, non-governmental organizations, etc. [A settlement of a dispute is much more than simply 'declaring a winner', but also showing which party's view on the facts and the law prevails and the reasons thereof. That being said, an effective and appealing dispute resolution system is one which is accessible to as many stakeholders as possible, providing a fair, equitable, timely and cost effective resolution and very importantly, as will be later examined in this article, ensuring the recognition, enforcement and execution of the final decision (HERTZFELD; NELSON, 2011, p. 2).

In the context of outer space activities, a dispute could potentially involve a plethora of situations, which may however be grouped in several scenarios – an accident or occurrence taking place in space, an accident or occurrence that took place in space but led to the manifestation of certain results on Earth, most commonly space objects causing damage to private persons or property, and a third category wherein an activity or occurrence taking place on Earth is inextricably linked to an outer space activity (TRONCHETTI, 2013, p. 2).

Throughout the article, an attempt will be made to address a non exhaustive list of questions and challenges to dispute resolution in space law, in light of existing, as well as proposed models for dispute settlement. One of the fundamental questions relates to whether the current legal framework for settlement of disputes relating to outer space can be deemed as satisfactory and if not, what changes need to be introduced on the international and national

level. Further to that point and more specifically a question arises as to whether the dispute resolution framework of today adequately addresses specific types of disputes, such as private entities versus states. If that is not the case, should this state of affairs be remedied as soon as possible or will that happen naturally as the importance of the space sector grows even more?²

The 1984 ILA Draft Convention on Settlement of Outer Space Disputes [hereinafter ILA Draft Convention] which under its Article 37 establishes the International Tribunal for Space Law poses another question – *is it really necessary at present to establish a permanent court or tribunal devoted exclusively to space disputes, when the demand, as some authors put it, is rather low?* There seems to be a considerable support in academia in favor of such a sectorialized approach to dispute settlement for space-related activities (POCAR, 2012, p. 174).

In this regard, it seems pertinent to also examine whether the tendency of states favoring non-binding methods of Alternative Dispute Resolution [hereinafter ADR], such as negotiations (GOH, 2007), is necessarily a worrying trend that needs to be rectified. As a penultimate point, how do cross-waivers of liability and the liability regime established under Convention on International Liability for Damage Caused by Space Objects [hereinafter Liability Convention] affect dispute settlement in space-related matters?

Finally, this article asks the ultimate question — can we point to one form of dispute settlement, whether already in place or still contemplated, which is truly the best-suited for outer space activities? From the outset, the author of this article considers that the complexities entailed by outer space disputes presuppose a rather skeptical stance towards a 'one-size-fits-all' solution and instead opts for a careful weighing of the pros and cons that different methods have to offer to their users.

Turning to some of the challenges facing settlement of outer space disputes, one of the main issues is with respect to the restrictions upon users many of the methods impose. To be precise, various venues capable of resolving disputes concerning space law are not open to private entities, but only to states.³ Another issue which arises out of the difference in status under international law between private entities and states is one of recognition, enforcement and particularly *execution* of foreign arbitral awards.

As of 24 June 2018, the 1958 Convention on the Recognition and Enforcement of Foreign Arbitral Awards [hereinafter the New York Convention] will enter into force for its 159th and newest member, Sudan (NEW YORK CONVENTION GUIDE, w/d). Such a widespread adoption of the convention in practice means that even if all signatories decide to recognize and enforce foreign arbitral awards on the basis of reciprocity under Article 1(3), that still equates to almost universal application of the rule.

Another relevant international instrument to be considered in this regard is the Convention on the Settlement of Investment Disputes between States and Nationals of Other States [hereinafter ICSID Convention], which has 162 signatories up to the present (ICSID, w/d).

What is common here is that both conventions stipulate that recognition and enforcement may be sought against states as well (SAUNDERS; SALOMON, 2007, p. 469). The problems however arise not necessarily with recognition, nor even enforcement, but the execution of the arbitral award.

The New York Convention does not even mention the term, whereas the ICSID Convention does mention it, but subjects it to the legislation of the state against whose assets execution is sought (ICSID Convention, 1965, art. 54[3]). Execution against property of a state usually clashes with the sovereign immunity it enjoys, which prevails under international law, as some ICSID cases illustrate all too well. In *AIG Capital Partners Inc. and another v. Republic of Kazakhstan and others* it was held that Kazakhstan acted arbitrarily and in utter disregard of due process of land, its actions amounting to expropriation. Subsequently claimants tried to enforce the award in English courts against assets of the National Bank of Kazakhstan, but the English High Court refused recognition on the grounds that enforcement may only be directed against state property intended for commercial purposes, whereas the assets of a state's central bank are not considered to fall into that category (SAUNDERS; SALOMON, 2007, p. 469 *et seq*).

In *LETCO v. Liberia*, enforcement of an ICSID award against Liberia was granted, but the U.S. court refused execution against fees and taxes payable by shipowners in the United States to Liberia, since the collection of taxes by the Government of Liberia was an exercise of a sovereign power, and not a 'commercial activity' within the exception provided for in section 1610(a) of the FSIA (SAUNDERS; SALOMON, 2007, p. 469 *et seq*). In an attempt to address this issue, ICSID recommends the following model clause for the purpose of overcoming the sovereign immunity defense:

The Host State hereby waives any right of sovereign immunity as

to it and its property in respect of the enforcement and execution of any award rendered by an Arbitral Tribunal constituted pursuant to this Agreement (ICSID Model Clauses, 1993).

Another barrage of challenges comes from the nature of the subject matter of outer space disputes – on one hand vital interests of national security present challenges to any proceedings that require the producing of evidence and on the other the technical character and specificity impose a high threshold for arbitrators, judges and mediators to meet in order to comply with the expectations of the users of the corresponding method of dispute settlement (BRISIBE, 2013, p. 14-15).

Types of dispute settlement for outer space activities and the benefits and shortcomings they entail.

Dispute settlement mechanisms open exclusively to states.

Article 33 of the Charter of the United Nations [hereinafter the UN Charter] provides that states shall primarily seek a solution of their disputes by "negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or

other peaceful means of their own choice". Further, it is established that the provisions of the UN Charter are applicable to activities in outer space.⁵

Dispute settlement under the Outer Space Treaty and the Liability Convention

At the outset it should be noted that the word arbitration or any variation thereof is not mentioned a single time in any of the five international law treaties on space law. The Outer Space Treaty mentions consultations in Articles 9 and 12, but rather than a dispute resolution mechanism, they are designed as steps in a process to avoid the occurrence of a dispute in the first place. This is so, as Article 9 calls for consultations before a state may undertake an activity that could "cause potentially harmful interference". Article 12 speaks in similar terms about taking precautionary measures.

By contrast, the Liability Convention addresses in Article 8 to 22 a dispute resolution mechanism, which is heavily influenced as will be shown, by the liability regime chosen. Article 5 of the Liability Convention provides that all states launching a space object together are jointly and severally liable for any damage caused by it. The dispute resolution mechanism under the Liability Convention would seem to be impractical especially as regards cases of the increasingly common nowadays joint space ventures, which involve joint and several liability for the launching states under Article 5. This is so as it would be "unfeasible for a launching state to declare acceptance of the compulsory nature of the Claims Commission if the other launching states do not do the same" (VIIKARI, 2011, p. 226).

As for the specifics of the dispute resolution under the Liability Convention, the injured state may present a claim against the launching state of the object that caused damage both in pursuing its own rights under international law and by exercising diplomatic protection. Both the territoriality and nationality principles apply when determining standing under Article 8 of the Liability Convention. Claims must be presented to the liable launching state(s) through diplomatic channels within one year of the date on which the damage occurred (LIABILITY CONVENTION, 1976, art. 10[1]) or within one year following the date when the state suffering damage learned or could reasonably be expected to have learned of the the damage or the identity of the liable launching occurrence of LIABILITY CONVENTION, 1976, art. 10[2]).

After claims are presented, another one-year time limit applies for reaching a settlement and if none is achieved, the parties must, at the request of either of them, establish a Claims Commission LIABILITY CONVENTION, 1976, art. 14). The Claims Commission will be made up of one member chosen by each state party to the dispute and a chairman chosen jointly by them LIABILITY CONVENTION, 1976, art. 15[1]). This dispute resolution tool has been described by some authors as either an ad hoc tribunal (BÖCKSTIEGEL, 1993, p. 3) or a semi-arbitration court.

This regime has been criticized for several reasons, such as the non binding character of the final decision, unless parties to the dispute have agreed otherwise under Article 19(2) of the Liability Convention. However, even if the Commission renders a "final and

recommendatory award" (LIABILITY CONVENTION, 1976. art. 19[2]) instead, this award must still be considered in good faith under the same provision and thus states will be extremely reluctant to derogate from it (KERREST, 2001, p. 465-466).

One advantage of this regime is that it does not require exhaustion of local remedies when a state presents a claim to a launching state in the exercise of diplomatic protection of its nationals (LIABILITY CONVENTION, 1976. art. 11[1]). However, this brings with itself a drawback in that if a national of a state pursues his rights in the courts of a launching state, no concurrent claim against the launching state may be pursued by the state of the injured national under the Liability Convention.

Another disadvantage of this regime relates to the customary discretional powers of the state exercising diplomatic protection regarding whether or not to press and sustain the claim (ICJ, 1970, p. 44; LEYS, 2016, p. 7; GOROVE, 1980, p. 44), as well as whether and to what extent the compensation obtained is to be disbursed to the injured national.

To conclude, two more disadvantages need to be pointed out. One relates to the potential for lengthy proceedings and uncertainty as to the enforceability of the decisions, especially if the parties did not agree on the binding effect of the Commission's decision. Another is the evaluation provided by history - in the more than 45 years that passed since its entry into force, the Liability Convention's dispute resolution mechanism has only been invoked once by Canada in the *Cosmos 954* case, where Canada pressed a claim against the USSR under the Liability Convention. Ultimately, however, the matter was resolved under a protocol by which the Soviet Union agreed to pay a compensation in the amount of 3 million Canadian dollars "in full and final settlement of all matters connected with the disintegration of the Soviet satellite Cosmos 954 in January 1978", whereby the protocol did not refer to the Liability Convention (VIIKARI, 2011, p. 230).

Adjudication by the International Court of Justice

The main disadvantage here is that the ICJ is only open to states pursuant to Article 34(1) of its Statute. Some of the advantages include the fact that the ICJ is a permanent judicial body, thus obviating the need to be reconstituted for each case as in arbitration or other forms of alternative dispute resolution [hereinafter ADR], as well as the competence and authority of the ICJ judges who are usually among the most eminent scholars in the field of public international law and that by art. 2 of the ICJ Statute are "jurisconsults of recognized competence in international law". By the present day there is also a substantial body of both ICJ and PCIJ cases⁶ which sheds clarity as to the applicable norms of international law and the legal reasoning employed by the World Court.

Despite all these advantages however, the ICJ has not yet heard a single case concerning outer space activities (HOFMANN, 2014, p. 1). A numerical study by Arthad Kurlekar may provide at least a partial explanation as to this phenomenon. According to the study only 23 states parties to the Outer Space Treaty and 23 states parties to Liability Convention⁷ may invoke the jurisdiction of the Court on conditions of reciprocity, thus reducing even more the potential usefulness of the Court (KURLEKAR, 2016, p. 389).

One way to increase the appeal of the ICJ is to create a special chamber of the ICJ for space law disputes under Article 26 of the ICJ Statute, similar to the formation of the ICJ Chamber for Environmental Matters. It should be noted, however, that the Environmental Chamber ceased to exist in 2006 and in the 13 years of its operation no state ever referred a case to it (ICJ, w/d) thus seriously undermining the chances of success of a similar venture.

ITU regime of dispute settlement

Another type of dispute settlement in matters pertaining to outer space activities is the one contained in the ITU Constitution and ITU Convention. The former under Article 56(1) gives a wide latitude to states to resort to negotiations or any other method agreed upon, whereupon if the dispute remains unresolved, either of the states parties may have recourse to arbitration, which is regulated in detail within the ITU Convention. At first glance, this seems like a good solution as it provides the users of dispute resolution with many choices.

However, as some authors point out, this dispute resolution system has become a "dead letter" (VIIKARI, 2011, p. 231). All of this, combined with only allowing states to be parties to a dispute and the narrow selection of subject matters covered by ITU arbitration, such as harmful interference to registered radio frequencies (POCAR, 2012, p. 176) limit the usefulness of the regime for all outer space activities stakeholders.

World trade organization dispute settlement

According to the WTO website, a dispute arises when "a member government believes another member government is violating an agreement or a commitment that it has made in the WTO" (WTO, w/d). The dispute settlement mechanism of WTO is based on the provisions of the WTO Understanding on Rules and Procedures Governing the Settlement of Disputes [hereinafter WTO DSU Rules]. The dispute resolution mechanism under the WTO DSU Rules involves a mix of in-court and out-of-court methods, such as a review by panel, which may be appealed, consultations as between the parties all throughout the contentious proceedings, etc.

Contentious proceedings are carried out before panels, which under Article 8 of the WTO DSU Rules "shall be composed of well-qualified governmental and/or non-governmental individuals, including persons who have served on or presented a case to a panel". An interesting solution is the addition of Article 10, which stipulates that "the interests of the parties to a dispute and those of other Members under a covered agreement at issue in the dispute shall be fully taken into account during the panel process", an approach far more liberal than most arbitration rules would allow by virtue of comparison and thus worthy of praise.

As of today, there are arguably only two cases that were ever presented before a WTO panel and have bearing on outer space activities at the same time. The first one was instituted at the request of the U.S. against Mexico due to alleged breach of obligations affecting telecommunication services and the second one involved a dispute between the European

Union and Japan regarding the "procurement of a purchase of a multi-functional satellite for Air Traffic Management". It must be noted, however, that the latter case was resolved amicably (HOFMANN, 2014, p. 2).

Bilateral legal framework agreements of NASA with foreign space agencies

Another interesting example of an inter-state dispute resolution system is contained in the multitude of bilateral agreements between NASA and foreign space agencies for collaboration in the exploration of outer space. Indeed, NASA has concluded various bilateral legal framework agreements with the space agencies of other countries, which invariably contain an express provision for mandatory resolution of disputes through negotiations and consultations, whereby it is intended for those disputes to be resolved "at the lowest possible technical level" involving program managers and only in extremely rare cases reaching the level of NASA Administrator (WHOLLEY; MIRMINA, 2008, p. 7). Ironically, it would seem that by way of comparison, this system is much more successful than the preceding 3 combined.

From a different perspective, this example is illustrative in one more respect, i.e. the inclusion of cross-waivers of liability, which are well recognized as standard practice of risk allocation in joint space activities, where "each party assumes its own risks inherent in the cooperative activity" (WHOLLEY; MIRMINA, 2008, p. 6). Section 309 of the Space Act authorizes NASA to grant a waiver of claims on a reciprocal basis. Save for a few exceptions, both states parties to a bilateral framework agreement agree not to sue each other for any damage caused by the mutual activities. Apart from other more practical considerations, this solution serves to foster inter-state collaboration in the exploration of outer space.

Dispute settlement systems accessible by both states and private entities

Since this part of the article will primarily deal with different types of arbitration that are available to states and private parties to an outer space activity related dispute, a short introduction as to the generally accepted core principles of arbitration is warranted. To begin with, as already mentioned, arbitration is typically open to all – states, legal and natural persons, international organizations, etc. A key characteristic is the presumptive in many cases confidentiality of arbitration proceedings, which many consider to be essential to its appeal, while others find grounds to criticize it on that count. It is also typical for parties to be able to choose their arbitrators from a pool of experienced and impartial professionals (HERTZFELD; NELSON, 2011, p. 9). Traditionally, arbitration is perceived as more expeditious and cost-effective than litigation, which may, however, prove to not necessarily be the case.⁸

After this optimistic start, it is suitable to reflect on what does not work that well in arbitration. To begin with, the confidentiality that arbitration users are so fond of may not be looked upon so favorably by other stakeholders who are not parties to the dispute, but are indirectly affected by the outcome. The lack of publicity of arbitral awards⁹ also

creates difficulty in establishing precedent and by virtue of that impedes the achieving of a higher level of predictability, which is crucial to any system of dispute settlement.

Another disadvantage can be inferred from states' general unwillingness to submit confidential information to an arbitral tribunal, despite the non-public character of the proceedings (HERTZFELD; NELSON, 2011, p. 9). Finally, as arbitrators are not always required to provide parties with a written rationale, this frustrates the purpose of allowing a party to understand the reasons for the wrongful nature of its conduct and how to remedy it in the future. A view has been expressed that arbitration in space disputes is most viable for accidents in outer space involving two or more different states or companies headquartered in different states, where the damage suffered is enough to warrant the constitution of an international tribunal and where primary resolution through diplomatic negotiations is not possible (HERTZFELD; NELSON, 2011, p. 10).

Some of the existing dispute resolution mechanisms are considered below, which can be applied to deciding space-related matters. The sequence with which they are presented follows no particular order, save for transiting from methods dominated by states' participation through the, in this author's opinion, *aurea mediocritas* of the Permanent Court of Arbitration Optional Rules for Arbitration of Disputes Relating to Outer Space Activities [hereinafter PCA Space Arbitration Rules] and finally arriving to methods primarily concerned with the individual, such as the Convention for the Protection of Human Rights and Fundamental Freedoms [hereinafter ECHR Convention]. As a final preliminary note, commercial arbitration between private entities is possible under either the ICC Rules of Arbitration or the UNCITRAL Arbitration Rules - these rules however may not necessarily be adequate to address the specificity of disputes regarding outer space activities (WEBSTER, 2010).

The European Space Agency dispute resolution mechanism

Although the European Space Agency [hereinafter ESA] is an inter governmental organization that deals primarily with inter-state disputes, Article 25 of Annex I to the Convention for the Establishment of a European Space Agency [hereinafter the ESA Convention] stipulates for a second type of dispute resolution, i.e. arbitration for ESA contracts, hence its inclusion here and not in the previous category.

With respect to inter-state disputes, the ESA Convention of 1975 provides in art. 17(1) that in case the matter is not solved by or through ESA's Council of Ministers, either party may submit the dispute to arbitration, which is final and binding upon the parties. Article 17(2) of the ESA Convention allows states to choose the rules for the arbitration procedure, a right which if not exercised would subject the arbitration to the rules contained in Article 17.

The main disadvantage of this dispute resolution tool is, understandably, its limited scope – first, only between members of ESA, or between a member and ESA itself, and second, regarding only "the interpretation or application of this Convention or its Annexes" (ESA CONVENTION, 1975, art. 17[1]). Absence of any disputes under the

ESA Convention may be attributed to the widespread adoption and use of cross waivers of liability (BOHLMANN, 2013, p. 4), which were referred to in the previous segment.

Turning to disputes that arise under an ESA contract, they are, as noted above, subject to arbitration, after the parties have employed their 'best efforts' to resolve the dispute amicably (ESA, 2013, Clause 35[1]). The rules to govern such arbitration, absent agreement to the contrary, will be the International Chamber of Commerce Rules of Arbitration [hereinafter ICC Rules] (ESA, 2013, Clause 35[2]). To date, there are no records of any arbitration proceedings instituted between ESA and a private contractor (FARAND, 2011, p. 150), which is also assumed to be a consequence of the wide implementation of cross-waivers of liability (BOHLMANN, 2013, p. 7). This is significant, as roughly 85 percent the budget of ESA is spent on contracts with private entities from the space industry, whereby ESA's budget for 2013 was over 4 billion Euro (BOHLMANN, 2013, p. 6).

PCA Space Arbitration Rules

Raison d'être of the PCA Space Arbitration Rules

The substantial increase in the number and variety of actors involved in space activities – over 30 countries possessing space industries as opposed to the longstanding historical domination of the U.S. and the former USSR (GOH, 2007, p. 164), the relative relaxation of government control over space activities (GOH, 2007, p. 157) and the development of a variety of potential commercial uses of outer space has led to "the influx of a variety of non-state actors onto the stage of space law" (POCAR, 2012, p. 175). PCA Space Arbitration Rules were therefore created to address the *lacuna* in the dispute resolution framework which existed until then, whereby private entities had remained largely unrepresented (POCAR, 2012, p. 175).

The main advantages

As we see from the introduction of the PCA Space Arbitration Rules, they were based on the 2010 UNCITRAL Arbitration Rules with changes in order to "reflect the particular characteristics of disputes having an outer space component involving the use of outer space by States, international organizations and private entities" (PCA, 2011) Immediately apparent advantages include the discretion of disputing parties as to the selection of arbitrators and the procedural rules to be applied (VIIKARI, 2011, p. 242).

Additionally, the PCA Space Arbitration Rules under art. 26 thereof provide for the possibility of the arbitral tribunal to order interim measures HOFMANN, 2014, p. 2). Furthermore, arts. 28 and 34 of the rules establish the confidential character of the hearings and the final award, which is particularly important for states, as space-related activities, even when primarily commercial in nature, almost invariably involve interests of technological advancements or national security, such as remote sensing imagery (GABRYNOWICZ, 2010, p. 6-7).

Anything wrong with them?

There are not a lot of disadvantages to this system of dispute settlement, which allows for both inter-state and investor-state arbitration. It has been suggested, however, that the PCA Space Arbitration Rules have a limited role to play as regards purely private disputes (VIIKARI, 2011, p. 243). More proper venues for this type of dispute may be found *infra*.

Applicability of the ICC Rules to outer space disputes

The main advantages associated with the ICC Rules of Arbitration of 2017 appear to be shared between most methods on international arbitration, in that they provide a neutral venue, flexibility for parties to choose the framework within the limits of which their dispute will be resolved, confidentiality of the proceedings and the final award, etc. One important additional benefit for the users of the ICC Rules of Arbitration provided by art. 1(2) is the supervisory functions exercised by the International Court of Arbitration to ensure quality of proceedings. Another positive remark relates to its popularity as a method of resolving disputes on outer space activities (RAVILLION, 2004, p. 2), which signifies the high degree of reliability it exhibits to arbitration users.

A typically cited drawback of the ICC Rules relates to the high fees imposed on the parties, which are based on a percentage of the amount in dispute (ICC RULES OF ARBITRATION, 2017, app. 3 – art. 3[b]; BOSTWICK, 1995, p. 33). This is significant as recovery in disputes relating to outer space activities usually involves a considerable monetary amount (HOUT, 2002, p. 15).

ILA Draft Convention on Settlement of Outer Space Disputes [hereinafter ILA Draft Convention]

The International Tribunal for Space Law is established under Article 37 of the 1984 ILA Draft Convention. One of its main advantages is the inclusion of both states and private entities as its potential users (COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE LEGAL, 2001, p. 15). The ILA Draft Convention also envisages the possibility of conciliation preceding arbitration, whereby if parties agree to conciliation, under Article 21 they are bound to it until proceedings are terminated or until after the conciliators have sent their recommendations to the parties (SCHAEFER, 2001, p. 216-217).

There is also a wide scope of application, which includes "all activities in or with effects in outer space, if carried out by states or IGOs parties to the convention or nationals of contracting states or from the territory of such states" (LOTTA, 2011, p. 234), but states may opt out of some of the provisions of the Convention or limit its applicability to certain space activities under Article 1.2 of the ILA Draft Convention, which would in turn lead to undermining the harmonization of dispute resolution procedures (KURLEKAR, 2016, p. 393). Another perhaps not ideal solution was the inclusion of non-exclusive exercise of jurisdiction by the Tribunal, meaning that the parties could refer their disputes concurrently to the ICJ or an ad hoc arbitration (KURLEKAR, 2016, p. 393).

European Court of Human Rights [ECHR]

The ECHR was established to adjudicate on alleged violations of human rights under the Convention for the Protection of Human Rights and Fundamental Freedoms [hereinafter ECHR Convention] by a state party to the convention with respect to any person within their jurisdiction (ECHR CONVENTION, 1950, art. 1).

Article 10 of the ECHR Convention, which protects the freedom of expression, has given rise to several cases involving space activities, relating most of all to either rejection of broadcasting licensing or denial of the right to install satellite dishes (ECHR, 2008).

Multi-door courthouse system

The multi-door courthouse system is based on the concept of a courthouse which provides all types of dispute resolution services under 'one roof', where the court assists the parties in choosing the best mechanism to solve their differences (GOH, 2007, p. 8). This model features a unique procedure of "screening" of disputes prior to determination as to the most suitable form of dispute settlement (GOH, 2007, p. 8). Such screening is done by experts who evaluate the best mode of dispute resolution through a thorough examination of the facts and taking into account the preference expressed by the parties (GOH, 2007, p. 292). The screening process ultimately should produce a comprehensive analysis of "cost, speed, requirement of confidentiality and the requirement of binding nature of the resolution" (KURLEKAR, 2016, p. 394).

Despite boasting significant advantages in terms of efficacy, the screening process has been dubbed by some authors to involve issues of transparency as to selection of screening experts as well as concerns regarding their rather substantial powers in determining the method of dispute resolution which might impact the final result (KURLEKAR, 2016, p. 394).

International Space and Aviation Arbitration Court

Created by the French Air and Space Law Society, the International Space and Aviation Arbitration Court is located in France and based upon French law and is aimed at the resolution of space-related disputes between international parties that are exclusively private entities (BOURELY, 1993, p. 144). The rules of the court envisage that it delivers a final and binding award for disputes referred to it. In a typical fashion for arbitral tribunals, its proceedings and final award are strictly confidential. The rules also provide for the possibility of the arbitral tribunal to issue an interim award. The rules of the court similarly provide a list of specialized arbitrators sorted in categories depending on their respective field of expertise. As for costs, those represent a lump sum due for each day there is a hearing of the arbitral tribunal (VIIKARI, 2011, p. 238). Despite being a commendable initiative, the relevance of this arbitration court is questionable as no cases are known to have been referred to it (VIIKARI, 2011, p. 239).

To sum up, Dispute settlement is the central pillar of the multilateral trading system, and the WTO's unique contribution to the stability of the global economy. Without a means of settling disputes, the rules-based system would be less effective because the rules could not

be enforced. The WTO's procedure underscores the rule of law, and it makes the trading system more secure and predictable. The system is based on clearly-defined rules, with timetables for completing a case. First rulings are made by a panel and endorsed (or rejected) by the WTO's full membership. Appeals based on points of law are possible.

However, the point is not to pass judgement. The priority is to settle disputes, through consultations if possible. By January 2008, only about 136 of the nearly 369 cases had reached the full panel process. Most of the rest have either been notified as settled "out of court" or remain in a prolonged consultation phase — some since 1995.

MODULE-VI

IMPACT OF COVID-19 ON TRADE OF TELECOMMUNICATION AND SPACE SECTOR

IMPACT OF COVID-19 ON TRADE AND BUSINESS OF TELECOMMUNICATION AND SPACE

A. IMPACT ON TELECOMMUNICATION

Given the quick spread of COVID-19 and an increase in countries imposing restrictions on movement, our daily lives have required more time at home and more usage of data for work and leisure, resulting in a significant impact on the Telecom sector. This article explores how telecommunication companies are focusing on increasing network resiliency and reliability for the consumer while also looking at how COVID-19 may impact their planned investments, particularly in 5G.

GLOBAL IMPACT:

As the coronavirus pandemic spreads across the world, forcing people into their homes, electronic communications have and will continue to play a vital role in supporting families, businesses and individuals. Accordingly, electronic communications regulators across the globe are adapting their approach to regulation. Compliance with regulatory obligations continues to be important. However, regulators recognize that the impact of COVID-19 means that it will not always be possible to meet these obligations. In such circumstances, industry should make decisions that support critical services, vulnerable people and those who are relying on communications services.

i. <u>Increased demand for capacity</u>

Many countries have introduced social distancing measures (closure of schools, certain types of businesses and facilities), and many companies that were not forced to close have voluntarily switched to home-office regimes. Some electronic communications providers have reacted to the unusual situation and increased free minutes and mobile data plans or even offered unlimited mobile data to keep customers connected during the COVID-19 pandemic. In addition, some streaming platforms are offering free membership to help people cope with prolonged times of isolation at home (e.g. Amazon Prime Video is streaming kids' movies and TV for free).

As a result, electronic communications traffic has significantly increased for teleworking, online teaching and entertainment purposes, raising worries that this could result in network congestion. Internet access services providers and internet exchange hubs have reported record-setting increases in internet traffic in recent weeks. For example, DE-CIX in Frankfurt, one of the world's busiest internet interconnection hubs, has reported a new all-time traffic peak of more than 9.1 Tbits/s and relayed some interesting statistics [e.g. 10% average data traffic growth, 100% rise in video conferencing or 50% growth in content delivery networks ("CDN") traffic]. The number of voice calls has also increased significantly – for example, AT&T and Sprint in the US have reported 44% increase of voice calls and 88% increase of Wi-Fi calling.

This increase in traffic may risk creating network congestion and require the use of traffic management measures. The European net neutrality regulation (Regulation 2015/2120) prohibits operators from blocking, slowing down or prioritising traffic. On the other hand, the Regulation allows the operators to apply exceptional traffic management measures to prevent impending network congestion and to mitigate the effects of exceptional or temporary network congestion, provided that equivalent categories of traffic are treated similarly. The Body of European Regulators for Electronic Communications (BEREC) and European Commission issued a joint statement, encouraging a responsible use of such exceptional measures to prevent network congestion.

"The increase in Internet traffic has not led to a general network congestion so far," the joint statement said. BEREC has set up a special reporting mechanism to monitor and respond to emerging capacity issues. Streaming providers, such as Amazon, Facebook, Netflix or YouTube, have voluntarily committed to reduce their streaming bitrate in Europe (switching to standard definition streaming during peaks). Other platforms are believed to be doing the same.

In the US, the Federal Communications Commission (FCC) has granted AT&T, Verizon, T-Mobile, and US Cellular temporary access to more wireless spectrum access to help meet increased demand.

ii. <u>Informative text messages and alerts and emergency communications</u>

In many countries around the world users, receive warnings, tips or information in text messages sent by state authorities via mobile operators. In addition, people may sign up for receiving alerts via various applications. For example, the World Health Organisation Health Alert brings COVID-19 facts to billions of people via WhatsApp.

This trend in fact anticipates what will become a regulatory requirement by 21 June 2022 under the new EU Electronic Communications Code, as all EU Member States will have to set up a Public Warning System. This system will send alerts to all citizens and visitors' mobile phones in a specific area in the event of a natural disaster, terrorist attack or other major emergency.

In the US, the FCC issued an order declaring that hospitals, health care providers, state and local health officials, and other government officials may lawfully communicate information about COVID-19, as well as mitigation measures, without violating the *Telephone Consumer Protection Act*.

The FCC found that the current pandemic constitutes an imminent public health risk, and calls relating to the COVID-19 pandemic from health care providers meet the definition of "emergency communications." However, the FCC cautioned that it will be vigilant in monitoring complaints about these calls and will not hesitate to enforce its rules when appropriate.

iii. Providing location data

As part of an effort to curb the spread of Covid-19, location data can play a significant role, especially in identifying potentially infected persons by tracking of previous movements of those who were already diagnosed, for enforcement of quarantine orders and/or statistics purposes. It goes without say, that, while the benefits of location data utilization are undoubtable, the issue raises privacy concerns.

The UK data privacy authority (Information Commissioner's Office) confirmed that the government could use mobile phone data to fight the spread of COVID-19.

In the Czech Republic, mobile operators and IT companies will help trace the movement and contacts of those infected with the coronavirus. The tracing will be voluntary and based on the consent of the COVID-infected owner of a cell phone. A special localization call centre was established for calling the infected whose movements will be tracked based on the location data (using triangulation algorithm) in order to help them recall and identify all people they were in touch with during the past two weeks.

Recently the Israeli government approved the use of technology (that was initially developed for counterterrorism purposes) to track coronavirus patients and notify those who may have been exposed to them, and to enforce quarantine orders.

At the EU level, a common approach to location data sharing is being discussed. Thierry Breton, Internal Market Commissioner, held a videoconference with CEOs of European telecommunication companies and the association of mobile telecommunications operators (GSMA) to discuss the sharing of anonymised metadata for modelling and predicting the propagation of the coronavirus.

iv. Keeping vital networks resilient

As a large proportion of the population works from home and schools have closed, industry has been working closely with governments to ensure that their networks remain resilient and continue to operate effectively.

The reliability of 999 and 112 calls is a critical priority. Under existing EU rules, providers of publicly available telephone services must ensure that emergency calls can be connected at all times, even in challenging circumstances. Regulators are in contact with those responsible for connecting 999 and 112 calls and have received detailed assurances on the capacity and resilience of both services.

The ITU has also launched a new Global Network Resiliency Platform (REG4COVID) to help national policy-makers, regulators and providers to cope with increasing pressure put on the networks during the COVID-19 crisis.

v. Network construction and spectrum auctions

The current situation is also expected to slow down the rollout of new 5G networks as both the supply of material and available of workforce may be affected. The outbreak of COVID-19 will also inevitably affect the finances and operations of electronic communications providers, as they are forced to temporarily close stores and face plunging roaming revenue because of severe travel restrictions.

Access to spectrum is also affected. Some of the scheduled 5G auctions have been postponed. For example, Austria postponed its 5G auction, originally scheduled to take place this month. The FCC delayed an auction of spectrum in the 3.5GHz (applications will now be due by 7 May rather than 9 April, bidding is set originally set to 25 June is postponed to 23 July). Further, the French regulator Arcep has reportedly decided to postpone the 5G auction scheduled in April to an unspecified date because of the coronavirus.

These challenges may make the case for network sharing stronger than it already was prior to the crisis, to create synergies and reduce costs. The recent European Commission's approval of the network sharing arrangement between Vodafone and TIM may provide additional useful pointers on how to structure network sharing to promote 5G and, at the same time, avoid regulatory and antitrust issues.

INDIA

A growing industry in this world of globalization, privatization and digitalization are that of the telecommunication industry. Like several other industries all across the world, the telecommunication industry is also being subject to growing challenges and fields of opportunities for its increasing transformation in recent days and the years to come. The initiation of these opportunities arises because globally the mobile data traffic has been on a rise along with which the demand for smartphones and data exhaustive appliances.

Such a magnificent industry, therefore, needs to be preserved for the generations to come and for the upliftment of the world as a whole which essentially demands a strong legal framework to fall upon in times of crisis. Various legislation has been made to combat the rising issues related to the sector, one of the notable being the *Telecom Regulatory Authority of India Act, 1997* to regulate the working of the sector globally. Age of digitalization has brought in the issue of data privacy and safeguard. Laws have been framed and are constantly evolving to protect the users of the appliances associated with the sector. Transformation in the sector has resulted in the growth of both the legal and economic sector associated with the telecom industry. Each day is a new challenge to cope and function efficiently by avoiding a minimum number of loopholes.

General Background:

Telecommunications in India can be traced back to the 19th century when the British East India Company introduced telegraph services in India. The past two decades have been

considered as the golden period for the telecommunications industry in India with exponential growth and development in terms of technology, penetration, as well as policy. All this has paralleled with the liberalization in this sector and huge investment by both domestic and foreign investors.

Like in other countries, telecommunications in India started as a state monopoly. In the 1980s, telephone services and postal services came under the Department of Posts and Telegraphs. In 1985, the Government separated the Department of Post and created the Department of Telecommunications ("DoT"). In the early 1990s the Indian telecom sector, which was owned and controlled by the Government, was liberalized and private sector participation was permitted through a gradual process.

- Telecom equipment manufacturing sector was completely deregulated.
- The Government then allowed private players to provide value added services such as paging services.

The Government has been introducing its strategy on telecommunications vide various telecom policies introduced in 1994 (i.e. the NTP 1994) and in 1999 (i.e. the NTP 1999) and most recently in 2011 (i.e. the NTP 2011). NTP 1994 and NTP 1999 were instrumental in paving the way for private investments to be made into the telecom sector. NTP 2011 aims to develop a robust, secure state-of-the-art telecommunication network providing seamless coverage with a special focus on rural and remote areas and bridging digital divide

Albeit there have been significant improvements in liberalizing the telecommunications sector, the law as it currently stands still bestows an exclusive privilege on the Government to provide telecommunications services. The Government has statutory power to grant licenses to private companies in India to enable them to provide telecommunication services.

Liberalization:

The Indian economy was liberalised in the 1990s and moved away from a monopolised market regime. FDI caps in the telecoms sector have been steadily liberalised ever since, and presently foreign investment of up to 100% is permitted in the telecom sector, with a prior regulatory approval required for investments exceeding 49%.

Other service providers ("OSPs") in the telecom space are allowed FDI of up to 100% under the automatic route. OSPs are in the nature of tele-banking, tele-medicine, tele-trading and ecommerce, which are allowed to operate by using infrastructure provided by various access providers for non-telecom services.

The FDI caps in the broadcasting sector vary depending on the service being rendered. While 100% FDI is permitted in broadcasting carriage services under the automatic route, FDI up to 49% under the approval route is permitted in uplinking of news and current affairs television channels.

26% FDI under the approval route has also been permitted for uploading/streaming of news and current affairs through digital media. The Department for Promotion of Industry and Internal Trade had sought views of the MIB on certain issues that have reportedly been raised by stakeholders over the government's decision and accordingly by way of a clarification issued in October, 2020 has stated that the decision of permitting 26% FDI through the

approval route would apply to the following categories of Indian entities, registered or located in India:

- (i) digital media entity streaming/uploading news and current affairs on websites, apps or other platforms;
- (ii) news agencies which gather, write and distribute/transmit news, directly or indirectly, to digital media entities and/or news aggregators; and
- (iii) news aggregators, being an entity which, using software or web application, aggregates news content from various sources, such as news websites, blogs, podcasts, video blogs, user submitted links, etc., in one location. The Government of India has also specified certain additional conditions that will need to be complied with by such entities:
- a. majority of the board of directors of the company shall be Indian citizens;
- b. the chief executive officer shall be an Indian citizen; and
- c. the entity shall obtain security clearance of all foreign personnel likely to be deployed for more than 60 days in a year by way of appointment, contract or consultancy or in any other capacity for functioning of the entity prior to their deployment.

GATS And WTO And India's Commitments:

India is a member of the World Trade Organisation ("WTO") and has adopted the "WTO Basic Telecommunications Reference Paper on Regulatory Principles" with reservations made under the General Agreement on Trade in Services ("GATS"). India has made specific commitments under the schedule of GATS as well as exclusions under the most favoured nation principle.

India has excluded the application of the most favoured nation principle with certain countries based on their bilateral trade relations. India has also committed to allow service providers of member nations to have a commercial presence in India provided the service providers obtain the relevant approvals from governmental authorities in India, adhere to the FDI regulations prescribed by the central government and obtain a licence from the DoT.

REGULATORY FRAMEWORK GOVERNING THE TELECOM INDUSTRY IN INDIA:

The important departments that regulate the telecom industry in India are as follows:

- i. *Department of Telecommunications:* As per the Indian Telegraph Act, 1885 and the Indian Wireless Telegraphy Act, 1933 the Central Government has the exclusive privilege of establishing, maintaining and working telegraph and wireless telegraphy equipment and has the authority to grant licenses for such activities. The Central Government acts through the DoT.
- ii. *TRAI*: TRAI is an autonomous statutory body established under Telecom Regulatory Authority of India Act, 1997. TRAI is the sole authority empowered to take binding decisions on the fixation of tariffs for provision of telecommunication services.

- iii. Emphasis needs to be placed on the interplay between the recommendatory powers of TRAI and the policy making powers of DoT. While the DoT is the sole authority for licensing of all telecommunications services in India, it is mandatory for the DoT to have TRAI's recommendations, beforehand, with regard to matters over which TRAI has recommendatory powers (mentioned above). Having done so, the DoT has the discretion to either accept or reject the recommendations of TRAI.
- iv. **TDSAT:** The TDSAT was established in 2000 under an amendment to the Telecom Regulatory Authority of India Act, 1997. The TDSAT has been vested with exclusive powers to adjudicate any dispute between:
 - the DoT and a licensee;
 - various service providers; and
 - service providers and groups of customers

The jurisdiction of civil courts has been expressly barred in cases where the TDSAT has jurisdiction.

- v. Wireless Planning Commission (WPC): The WPC was created in 1952 and is a wing of the DoT which is responsible for Frequency Spectrum Management, including licensing of wireless stations and caters to the needs of all wireless users (Government and Private) in India.
- vi. Standing Advisory Committee on Frequency Application ('SACFA''): SACFA is a wing of the DoT which gives approval for radio frequency (spectrum) used by telecom service providers. Obtaining a telecom license is not enough for the operator to begin rolling out the services; a no objection from SACFA is required.

There are various laws and regulations that govern the telecom industry in India. Some of the important ones are as follows:

- i. *The Indian Telegraph Act, 1885:* This Act is one of the oldest legislations still in effect in India and it inter alia authorizes the Government of India to grant telecom licenses on such conditions and in consideration of such payments as it thinks fit, to any person to establish, maintain, work a telegraph within any part of India.
- ii. *The Indian Wireless Telegraphy Act, 1933:* This Act was enacted to regulate the possession of wireless telegraphy apparatus. According to this Act, the possession of wireless telegraphy apparatus by any person can only be allowed in accordance with a license issued by the telecom authority. Further, the Act also levies penalties if any wireless telegraphy apparatus is held without a valid license.
- iii. *The Telecom Regulatory Authority of India Act, 1997:* This Act enabled the establishment of the TRAI. Interestingly, the 1997 Act empowered the TRAI with quasi-judicial authority to adjudicate upon and settle telecom disputes. Later this Act was amended by the Telecom Regulatory Authority of India (Amendment) Act, 2000 to bring in better clarity and distinction between the regulatory and recommendatory functions of TRAI. Further, the 2000 amendment served a very important purpose in completely differentiating the judicial functions of TRAI by setting up of the TDSAT.

There are various other laws which have an impact on the telecom industry in India such as the Information Technology Act, 2000 and the rules framed thereunder which inter alia sets out rules under which an intermediary (which by definition now includes telecom service providers such as internet service providers) may be exempt for liability in relation to third party links and content.

The Government also notifies various regulations from time to time which have an impact on this sector such as the Anti-Spamming Regulations which prohibit unsolicited commercial communications sent via SMS and require all telemarketers to register under the said regulations.

Age of Digitalization

Digitalization is the reason for the transformation brought about in the telecom industry. For this sector currently, the establishment of in-house digital competence stands necessary to meet with the demand towards the sector.

With digitalization entering the industry, the focus has shifted from network building to the adoption of technologically influenced mechanisms to bring in a change in the existing sector. For the operators, the task of implementing this transformation has not been a hard one but for the service providers, this is still a complex and detailed process.

With a gradual decline in the amount of revenue received from the traditional service providers, the adoption of this newly developed method is the only option left for the telecom sector to grab and apply. Other than just calls, music and video, the telecom sector is also bringing in e-health apps, security means of cars that are connected with the mobiles, economic transactions like Google Pay Paytm is rising every day.

Some of the telecom industries that are widely known as AT&T and Ooredoo are said to be very well adjusting to the new courses of the telecom sector. The aim of digitalization will be to provide services beyond the basic requirement of the consumers for this sector experiences high amount of competition with the players already existing in the market and have been successful in creating a healthy relationship with its customers.

What the digitalization age focuses on is to bring in the usage of 5G data services. The fact that in order to adapt to this sector, one has to go through a long way cannot be ignored.

While the world keeps on shifting into having a data-centric future, the motive to become customer-centric is also developing. A large number of disorder technologies in form of 4G, new messaging services like that of Whatsapp, Instagram, WeChat along with services associated with online streaming like that of Netflix, Amazon Prime, Hotstar which streams a large amount of data are also adding to change in the behaviour pattern of the customers.

While these companies have brought in consumer demand the service providers of these companies, that is the telecom sector, is facing large competition on several grounds. There has been a growth in the revenue of the sector by means of the consumption of video in mobile devices. The 2020 strategic agenda brought about by the sector is cost control models, upliftment of customer experiences and creation of business models digitally.

A LEGAL VIEW

In India, the telecom sector is governed by several legislations. First comes the *Indian Telegraph Act*, 1885 that helps in the regulation of telegraphs across the nation. This statute became the basis for the union government to issue various licenses concerning universal

access to the internet both within domestic and international limits followed by network operators working virtually. While the wireless Telegraph was governed by the regulation of *Indian Wireless Telegraph Act*, 1993, the cable television was regulated by the legislation which came to be known as the *Cable Television Networks (Regulation) Act*, 1995. With the setting up of the *Telecom Regulatory Authority of India (TRAI)*, revolutionary changes brought in the telecom sector. The regulatory authority provides scope for improvement for the globally emerging sector.

With a clear aim towards promoting transparency and fairness, the Telecom Authority of India introduced a consumer-centric welfare move in the month of January 2016 to compensate all consumers for any call drops which will be limited till the extent of three in a day. With the increase in broadband invasion in the sector, the latest development brought by the telecom authority is WANI or the Wi-Fi Access Network Interface which will enable Wifi services whenever necessary. The *TRAI Amendment Act*, 2000 specified the function associated with the authority governing regulation by dividing the existing body into two parts namely:

- 1. The Telecom Regulatory Authority of India;
- 2. The Telecom Dispute Settlement and Appellate Tribunal.

Conflict of TRAI with DOT

The confrontation of TRAI with that of the Department of Telecommunication (DOT) has been a long drawn legal battle in the telecom sector. In the famous case, *M/s Bharti Cellular LTD And Another v. Union of India (2010)*, where DOT was alleged to take a decision regarding network operations and data services without the prior permission and recommendation from that of TRAI which was further added by the revocation of license on the part of DOT without TRAI's involvement in the same.

The decision taken was that although there was an existence of an independent body governing the telecommunication sector in India, it was necessary for both the government and DOT to take the approval of TRAI before processing with any decision related to the sector as a whole. Thus, the ambit of TRAI 's authority was decided in this case along with which TRAI was provided with a quasi-judicial authority.

Role of Intellectual Property Rights

As the telecom sector is a growing industry, the requirement of Intellectual Property Rights comes to play as well. This is necessary to safeguard innovations taking place in the sector along with being a profit wheel for the companies associated with the sector.

In the well-known case of *Ericsson v. Micromax* (2016), the plaintiff, a well-known equipment company in the telecommunication network had filed a suit for infringement of patent and the court ruled on the basis of two new terms in the domain of Intellectual Property Laws that are FRAND and RAND.

While the former consists of the term fair and reasonable, the later symbolises reasonable and non-discriminatory. Cases related to Intellectual Property in telecom sector does not end here instead there are a number of cases that evolved with the issues of patents owned by

companies. In every case, the court concluded that any company working in this sector will adhere to reasonableness and fairness.

Customer terms and conditions:

The Indian telecoms regulatory regime does not separately provide specific rules for the customer terms and conditions; however, broad rules on certain issues have been laid down.

The unified licence, besides describing the relationship between the telecoms players and the DoT, also stipulates a few outline conditions within which the licensee is to provide its services to the subscribers. The telecoms players have to ensure that the customer terms and conditions are within the purview of the licence granted and also do not violate any specific rules laid down by the DoT and TRAI.

The DoT and TRAI have at times in the past regulated certain aspects of telecoms services, such as limiting the number of daily messages that can be sent using the short-messaging service (SMS), regulation of unsolicited commercial communication (UCC) and the 'do-not-disturb' service, both in the interests of end customers. UCC and SMS are serious problems. TRAI has taken several initiatives since 2007 to try and protect consumers from these telemarketing calls and messages and has intervened from time to time, to control or mitigate this problem.

TRAI issued a consultation paper on UCC dated September 2017, which provides an overview of various problem areas with the present system, like UCC-related complaints being on the rise, the long time taken to register or to take action against UCC complaints, victimisation cases, issues of similar headers, traceability of content providers, consent taking process, etc. It also highlights new trends like robocalls and silent calls, which may be of concern to customers.

TRAI also made recommendations on encouraging data usage in rural areas through provisioning of free data. In the past year it had stated that a scheme under which a reasonable amount of data, say 100MB per month, may be made available to rural subscribers for free and the cost of implementing this scheme must be borne by USOF. TRAI has also issued recommendations dated 9 March 2018 on in-building access by telecom service providers.

To ensure that there is a ubiquitous voice and data network inside commercial and residential complexes and large public places like airports, hotels and multiplexes, the first and foremost requirement is that TSPs and infrastructure providers gain category- access to in-building facilities and infrastructure.

Net neutrality:

There are currently no regulations or guidelines in place in India with regard to net neutrality. Hence it can be safely said that currently there are no limits on internet service providers' freedom to control and prioritise the type or source of data. Net neutrality has been contemplated by the NTP 2012. However, granting a general recognition and acceptance of the principle, the telecoms regulator has in certain instances proposed investigations into the data plans and packages offered by certain telecoms providers to their subscribers, to

determine whether they are in violation of net neutrality principles. There have been consultations initiated on the subject by TRAI, which issued a consultation paper on 'Overthe-top Services and Net Neutrality' in March 2015.

The DoT also constituted a committee, which submitted a report dated May 2015 on net neutrality. Further, in December 2015, TRAI issued another consultation paper on 'Differential Pricing for Data Services', which raised concerns over zero-rating platforms being offered by telecom service providers. Having completed its detailed, two-stage, consultation process, TRAI has considered the various points of view and formulated its recommendations on the subject.

This document lays down the recommendations starting with a discussion on the principle of non-discriminatory treatment, which forms the underlying basis of the net neutrality debate, which is followed by a discussion on the applicability of this principle to different categories of services, drawing a distinction between 'internet access services' and other 'specialised services' that currently exist or may evolve in the future.

It also outlines reasonable traffic management practices identifying permitted exceptions and lays down the supplementary requirements of a robust framework for transparency and disclosures. Further, it provides a monitoring and enforcement framework to implement the recommendations on non-discrimination, reasonable traffic management and transparency.

Zero-rating is a practice where mobile operators do not charge end consumers for access to specific websites or apps, but instead charge the latter for the data consumed by consumers in accessing the website or app.

As there is no specific regulatory legislation on net neutrality in India, zero-rating practices are discretely prevalent, being, however, subject to certain limitations. The ISPs and the telecom companies are prohibited from blocking, obstructing or delaying in any way, services and other internet and telecom traffic, unless necessary for reasons of congestion management, security, continuity of the network, etc. This blocking shall only be lawful, when necessary, to protect the integrity and security of the network or users' terminals.

Bandwidth throttling is often adopted in India to avoid traffic congestion, there being no regulatory mechanism to keep a check on the traffic management methods adopted by the TSPs. Also, internet users can request an ISP to filter their internet traffic by blocking certain services and applications based on ideological grounds.

Platform regulation:

Since 2015, Over the Top (OTT) services have witnessed a significant increase in adoption and usage. Technologies and networks for delivery of such services have also evolved during this period. Over a period of time TRAI has issued the various recommendations and regulations pertaining to multiple issues relating to OTT services such as the Regulatory Framework for Internet Telephony, prohibition on discriminatory tariffs on data services, net neutrality and privacy, security and data ownership in the digital services.

To further consider the remaining issues related to regulatory imbalance between TSPs and OTT players providing services that can be regarded as the same or similar to services offered by TSPs and issues related to economic aspects of such OTT services, TRAI issued a

Consultation Paper on Regulatory Framework for Over-The-Top (OTT) Communication Services in November 2018.

Next-Generation-Access (NGA) networks:

The NGA networks are presently not regulated by specific rules or obligations. Nonetheless, TRAI is working towards defining specific rules and regulations for the development and implementation of NGA networks. Further to providing for a specific set-up for the NGA networks, TRAI has formed a core committee to advise in this regard and initiated a consultation process.

With a view to increased penetration into India, including the provision of telecoms services in rural and remote areas, the DoT mandated the establishment of the USO Fund in 2002. The Broadband Policy was introduced in India in 2004. Initially, it was mandated that the USO Fund would only be used for providing basic telecoms services to such areas; however, with the expanding telecoms industry and with an eye for modernisation, all sorts of telegraph and telecoms services were brought within the purview of the USOs and the Fund constituted for the same.

In 2008, subsidy support was introduced for certain eligible operators to provide for operational sustainability of rural wireline household direct exchange lines. There have also been initiatives by the telecoms operators to promote broadband use in rural areas.

A regulatory framework specifically for NGA networks is expected to be established in the near future. In this regard, TRAI has on certain occasions-initiated consultations with regard to a number of issues and frameworks on the implementation of NGA networks in India.

Data protection:

There is no specific data protection legislation currently in place in India. However, with specific regard to the newly implemented regime, the unified licence explicitly sets out certain conditions for telecoms licensees to abide by to ensure that the data of end customers and subscribers remains secure.

As a blanket condition under the licence, the licensee is to ensure that all monitoring activities are to be carried out in accordance with any rules framed under the Telegraph Act for ensuring the privacy of voice and data. The Telegraph Act, in case of a public emergency or public safety, empowers the government, state government or an authorised government officer to order the non-transmission, interception, detention or disclosure of messages about a particular subject.

Additionally, to provide for an effective system of data protection, the Personal Data Protection Bill 2006 was introduced in 2006, but has not yet been formulated into a law. Subsequently, however, the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules 2011 (Sensitive Personal Data Rules) were brought into effect in 2011 under the provisions of the Information Technology Act 2000, under section 43A of the IT Act.

The rules provide for the implementation of reasonable security practices and procedures to be followed by entities handling sensitive personal data of individuals. These rules apply to all entities that acquire or deal with sensitive personal data or information of natural persons, irrespective of the nature of business activities. Thus, any part of big data falling within the ambit of sensitive personal data or information, which means personal information relating to a password, financial information, personal health condition and its records, sexual orientation, biometric information or any other details that are given to the body corporate for providing a service.

In the absence of any specific regime protecting the privacy of data in India, the Supreme Court of India has held that the right of privacy is a fundamental right of an individual. In a step towards this, the government of India constituted an expert committee under the chairmanship of Justice BN Srikrishna comprising of members from government, academia and industry to study and identify the key data protection issues and recommend methods for addressing them.

The committee put out a White Paper in December 2017 to solicit public comments on what shape a data protection law must take. After almost a year of deliberations and consultations, the Committee has submitted its Report and the draft Data Protection Bill 2018 to the Ministry of Electronics and Information Technology on 27 July 2018, which is yet to be tabled in the parliament.

The much-awaited Data Protection Bill 2018 makes 'individual consent' the keystone of data sharing. For consent to be valid, it should be free, informed, specific, clear and capable of being withdrawn. For sensitive personal data or information, consent will have to be explicit. The Bill is largely based on the principles of the General Data Protection Regulation in the EU.

Cybersecurity

India had no cybersecurity policy before 2013. It was on 2 July 2013 that the government unveiled the National Cyber Security Policy 2013. It aims at protecting public and private infrastructure from cyberattacks. It also intends to safeguard critical information such as personal information, financial and banking information, and sovereign data. The Cyber Security Policy 2013, along with providing a strong vision to secure the critical infrastructure and build a resilient cyberspace for citizens, business and government, also intends to circumvent any resultant economic instability arising from cyberattacks.

In the absence of any specific laws in this regard, the Information Technology (IT) Act 2000 and Rules provide for certain protections. The IT Act contains three major aspects (ie, legal recognition of electronic documents, electronic filing of documents with government agencies and to amend certain acts such as Indian Penal Code, Indian Evidence Act). The Act also covers cybercrimes under section 66 such as internet fraud, pornography, data theft and phishing.

The IT (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules encapsulate provisions for data protection and privacy. However, as cybersecurity becomes an exponentially growing concern, the need for a consolidated legal

framework has become a necessity that must be satisfied immediately. In addition to the above-mentioned provisions in place, the proposed Data Protection Bill, 2018 would also take care of the important aspects of cybersecurity.

Big data:

At present in India there is no specific legislation or regulation for big data. However, the data protection framework prescribed under the Sensitive Personal Data Rules under the IT Act would include big data practices in India. These rules provide that anybody corporate handling sensitive personal data or information, as discussed above, shall conform to the same for handling and dealing with such information. It is also possible that personal or even non-personal data, when processed using big data analytics could be transformed into sensitive personal data.

Therefore, there may be a need to create safeguards that will prevent misuse of personal information in these contexts of use mentioned in the White Paper issued by the Ministry of Electronics and Information Technology (MEITY).

Certain initiatives in relation to big data management have been taken by the government. The Department of Biotechnology plans to harness the power of big data to promote the biotechnology industry in India. Also, the Department of Science and Technology proposes to promote big data science, technology and applications in the country and to develop core generic technologies, tools and algorithms for wider applications for various government initiatives and functionalities.

Data localisation

The National Data Sharing and Accessibility Policy is applicable to all sharable non-sensitive data generated using public funds. For use and transfer of such data, the user of the data must acknowledge the source, provider and licence of data by explicitly publishing the attribution statement.

The Other Service Provider Guidelines, however, particularly bar any transfer or storage of data that originates on the Public Switched Telephone Network of Indian jurisdiction to any foreign jurisdiction, without prior consent.

According to the Information Technology (Electronic Service Delivery) Rules 2011 and Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules 2011, transfer of sensitive personal data and information by a body corporate or any person to another in India, or located in any other country ensuring the same level of data protection, may be allowed, only if it is necessary for the performance of the lawful contract between the body corporate or any person on its behalf and provider of information or where such person has consented to data transfer. In addition to it the body corporate must provide a privacy policy for dealing with such personal information and sensitive data.

Therefore, it can be decisively said that India does permit cross-border data transfers, provided that the data subject gives prior consent. In the telecom sector, India currently has a data localisation mandate with respect to customer account information. From industry

experience, this does cause some inconveniences with regard to international clearing house activities, particularly with regard to global telecom companies that are looking to provide enterprise-level telecom consolidation. The proposed Data Protection Bill, 2018 provides for all the data localisation concerns; however, it is yet to become a law.

RECENT TRENDS IN THE LAST FEW YEARS

A number of policy initiatives by the government and DoT have led to a complete transformation with phenomenal growth in the sector over the past decade and it is poised to grow further. The regulatory framework concerning communications and telecoms in India witnessed an evolution in recent years with the implementation of certain key initiatives, including MNP, USO and the introduction of the unified licence, among other things. The country is projected to witness a high penetration of internet, broadband and mobile subscribers in the near future. These steps were taken in line with the objectives set by the NTP 2012.

The unified licence regime has simplified the telecoms licence regime and allows all telecoms services to be offered under one licence. The unified licence allows the sharing of spectrum among the various licences, which was not permitted earlier. The UL regime has resulted in major consolidation of the telecom industry, resulting in only a few players in the market.

A major development was observed in the area of inflight connectivity services on various aircrafts. TRAI had issued recommendations on 'Introducing In-flight Connectivity Services in India'. After considering the recommendations of TRAI, the DoT issued Flight and Maritime Connectivity Rules, 2018 laying down the guidelines for provision of inflight connectivity services. The upcoming trends in the sector would further lead to an upscale in the market. The government had targeted broadband connectivity from 15 million currently to over 600 million in 2020, with voice connectivity being carried forward to data and emerging technologies including cloud computing.

The digital transformation is emerging as a key driver of sweeping change in the world around us. The telecommunication industry is at the forefront of this transformation. After connecting the individuals and enterprises, innovators are turning their attention to the M2M communications, which promise to connect billions of sensors and devices. Upgrading to 5G networks will connect wearable computers, a vast array of sensors, and other devices, leading to better health, economic gains and other advantages. The OTT segment is going to be a game changer in the digital space. A format set of legislation and regulation is expected form the government.

IMPACT OF COVID-19 ON THE TELECOM SECTOR:

Globally, the telecommunications sector is proving to be a core and essential infrastructure service to national economies, with data infrastructure becoming critical in a connected world and will likely increasingly attract a new class of investors such as large infrastructure funds. The publisher expects the Indian telecommunications industry to remain steady thanks to the defensiveness nature of the industry, amid the political uncertainties and an uncertain economic outlook due to the COVID-19 pandemic. Growing mobile phone penetration and emerging fixed broadband take-up among households will fuel future growth over the next five years.

According to our India Telecoms Report, the publisher forecasts that mobile subscriptions and fixed broadband subscribers will continue to fuel the telecoms sector growth in the 2019-25 period. More than 600m people became Internet users over the last in six years and another 600m more Internet users are expected to come online over the next six years by 2025. Following the market expansion over the last 5 years, the publisher forecasts sustained revenue growth to 2025, despite the Covid-19 pandemic and the diminishing impact of declining legacy voice and SMS revenue.

Mobile subscriptions are growing faster than mobile service revenue leading to ARPU decline after 3 years of intense competition with the market transitioning to 4G. With a market entry in late 2016, Jio jolted the mobile market from a standing start to becoming the largest mobile operator by the subscriber and third-largest by revenue in just three years.

Reliance Jio launch strategy was to offer three months of free data and free voice, and once that was up, kept the free voice offering permanent while charging only a low price for mobile data (INR50 for 1GB). This strategy is reminiscent to the classic Silicon Valley bet: spend money upfront to acquire customers, then make it up on volume because of a superior cost structure enabled by its 4G only network and the near-zero-marginal cost nature of technology. Jio's launch timing was perfect just at the time when competitors had sputtering 4G networks, it offered free Internet to a nation and demographics that could not afford it and increased its addressable market while its competitors were still relying on legacy voice and SMS revenue. Mobile network competitors quickly struggled to compete and a massive wave of consolidation ensued.

The publisher expects the overall telecoms market to grow again through to 2025 after a marked decline from 2017 and 2018 due to a mobile war.

Capex Investments

The Capex from Indian operators is highly cyclical with mobile rollout leading to investments in line with the operators' top-line growth. Capex investments peaked between 2016 and 2018 while Jio built its 4G mobile network and is declining to lower level in 2019 and will increase again from 2020 through to 2025, as mobile operators invest in 5G, bolster

their 4G coverage and increase capacity to fulfil strong data demand. The Capex to GDP ratio spiked between 2015 and 2017 and its started to slide from 2018 onwards.

Operator Profiles

Most operators lost revenue and EBITDA share to Jio in 2017 and 2018 and Bharti Airtel started to recover in 2019 with price rises across the market. Vodafone Idea lost both revenue and EBITDA share while merging and cost reduction measures started to flow in 2019 with improving EBITDA and cash flow.

The wave of market consolidation followed by Jio's market entry and the intense pricing competition should subside with a market of three large operators with high debt loads, all now focusing on a strategy of profitable growth in the mobile market.

Mobile Subscribers and Revenue

The mobile telecoms sector began consolidating two years ago, with twelve operators in 2017, India has now only four mobile network operators with nationwide across all 22 circles; Bharti Airtel, Vodafone Idea, Reliance Jio and BSNL/MTNL.

Average annual mobile revenue growth was lower (3.2%) than mobile service subscriptions growth (4.6%) during the period 2014-2019 highlighting the intense price war since Jio's market putting pressure on ARPU compounded by a reduction of dual-SIM cards feature, driving the low growth in mobile subscriptions. The 4G migration leapfrogged by Jio and followed by Vodafone Idea and Bharti Airtel is driving the growth in higher ARPU for operators with the mobile market consolidation now largely complete.

According to our benchmark study of mobile data pricing, India has the lowest rate per GB at just a few cents per GB, while Australia and China had the biggest cost reduction per GB mostly due to increased data allowance in plans while Singapore remains expensive.

Broadband Subscribers - FTTH Push and Fixed Wireless

The fixed broadband market is experiencing slow-growth mostly driven by the loss of share by the incumbent BSNL, followed by Bharti Airtel, Atria Convergence Technologies (ATC), Reliance Jio (including Den Networks and Hathway Cable), Vodafone Idea via its subsidiary You Broadband, all are now investing in full-fibre networks.

However, more competition is expected in the fixed broadband market with Jio's entry with its residential fibre broadband services likely to disrupt incumbent BSNL but also should increase the residential broadband subscriptions significantly. Fixed broadband penetration is forecasted to grow modestly as India's investments on full-fibre networks are slowly taking off with affordable packages and increased broadband household penetration growing.

Thematics - Telecoms Infrastructure / 5G / M&A / Infrastructure

Infrastructure funds, pension funds and government funds are assigning high valuation multiples to telecommunications infrastructure assets such as mobile towers, data centres, submarine cable and fibre infrastructure.

Investment funds are assigning high valuation multiples to telecommunications infrastructure assets such as mobile towers, data centres, submarine cable and fibre infrastructure. This report outlines some real market examples of how investors view and value these investments with real industry examples and EV/EBITDA comparatives and benchmarks.

The India Telecoms Report transactions database analysis highlights the hive of transactions in the India tower market, with the majority of telecommunications operators shifting assets to infrastructure entities and selling down to repay debts and further investments for capacity and coverage of their mobile networks. However, in the short to medium term, the telco sector is likely to experience some corporate activity with the fixed broadband market, now expected to come under pressure with JioFiber's launch and also broaden the scope of services beyond carriage to content and e-Commerce. The publisher projects strong earnings growth despite the huge debt pile and the looming required 5G and fibre to the home investments by the telecommunications operators. A new wave of M&A, network sharing deals over the next two to three 3 years will continue to consolidate around the large mobile operators, Bharti Airtel, Vodafone Idea and Reliance Jio.

The arrival of 4G moved the Internet off our desktops into our palms and pockets, 5G could transform the network from something we carry around to something taking us around either virtually (augmented reality or virtual reality) or in reality (autonomous vehicles), the 5G outcome and benefits beyond fast connectivity remain largely unknown in terms of business models, investments required and timeline.

As the global economy continues to reel from the shock and the lasting impact of the novel coronavirus (COVID-19) outbreak, "work from home" and "social distancing" have become the buzzwords in today's business landscape, with the telecom sector being the invisible hand driving this shift. Remote working, video conferencing, and telecommunications technology have quickly emerged as key enablers for business operations during this lockdown, and streaming services such as Netflix have become the go to source for entertainment, putting the telecom sector in the spotlight today.

The importance of having a strong telecommunications network during this lockdown has also been acknowledged by the government in the guidelines dated March 24, 2020, issued by the Ministry of Home Affairs (MHA), which provides that "telecommunications, internet services, broadcasting and cable services, IT and IT-enabled services (ITeS) only (for essential services)" are the essential services and are exempt from the lockdown. This exemption was also provided in the MHA notification dated April 15, 2020 (which extended

the lockdown until May 3, 2020) and in the MHA notification dated May 1, 2020 (which further extended the lockdown for a further period of two weeks).

According to news reports, overall traffic has jumped by 10% and streaming platforms have witnessed a 20% spike in viewership. Hence, several analysts now believe that unlike the manufacturing and other sectors that have come to a near standstill, the telecom industry might emerge as the golden child of this economic slowdown. However, the increased dependency on telecom networks, and the other restrictions on account of COVID-19, has raised a different set of challenges for the telecom sector, as highlighted below.

A. Implementation of exemptions for the telecom industry

Although the MHA had clarified that telecommunications, IT and ITeS were exempted from the lockdown, there were instances of local authorities asking personnel of telecom service providers at NOCs (network operation centres) and call centres to shut down operations. In response, the Department of Telecommunications (DoT) had written to chief secretaries of states on March 21, urging them to allow movement of field staff of telecom companies.

It is therefore essential that appropriate instructions are received at the field level so that the services can continue without interruption. The DoT had also written to chief secretaries of all states on March 24, requesting them to designate a nodal officer who can be contacted by service providers and telecom licensees in the event of any difficulty.

This is critical given that on-ground staff need continued access to towers for maintenance, to identify potential risks, and refuelling (for towers using diesel gensets). This move may help mitigate some of the issues seen at the local level, in ensuring that there are no obstructions in the working of the telecom sector.

B. Rising demand and current infrastructure

While demand for services continues to spike, given India's dependence on wireless traffic, there is increased pressure on cellular infrastructure.

According to reports, the mean mobile and broadband download speeds in India had fallen in March due to strain on the networks. Hence, the Cellular Operators Association of India (COAI) has written to the Government to request streaming service providers such as Netflix, Amazon Prime Video and Zee5 to switch to a lower definition streaming, to reduce advertisements and pop-ups, etc., in a bid to ease the strain on existing networks. Several service providers have already started working on this issue.

Industry analysts have stated that as far as telecommunication networks are concerned, fears of network choking are unfounded since there is sufficient additional capacity. However, the switch in network usage to residential networks as opposed to enterprise networks (which is technologically better configured for the high load traffic) may present another set of

challenges on managing network load. This trend may result in deeper broadband penetration for residential use. In order to meet demand, going forward, the COAI has written, vide letter dated March 20, 2020, to the Government to ease norms and expedite approvals for providing services, setting up towers and to instruct state-owned firms (MTNL and BSNL) to not terminate any interconnection points.

C. Impact of the lockdown restrictions

Admittedly, while there is increasing demand for telecom services, the telecom sector is dependent on several other industries, which have been adversely affected by the lockdown.

i. Impact on Manufacturing of hardware and other systems

According to reports, handset and network equipment manufacturers will be impacted due to global disruption in supply chains, which will lead to increased costs and lack of availability. Under the MHA order dated May 1, 2020, manufacturing of IT hardware has been permitted even in red zones, however no such activities can be undertaken in areas designated as containment zones.

According to industry body Indian Cellular and Electronics Association (ICEA), manufacturers may incur losses to the tune of nearly INR 15,000 crore due to suspension of production. Market analysts have recommended easing taxes and levies and relaxing costs on financial aid to ease the burden on the manufacturing sector, which will have a domino effect on the telecom industry.

ii. Addition of new subscribers

Given the movement restrictions during this lockdown, there has been a sharp dip in the number of customers purchasing new sim cards (including for migration to 4G networks).

COAI has indicated that during a regular month, the average net addition is 3 million subscribers, but due to COVID-19, the number in March may be below 1 million. We are likely to see impact on revenues only in the first quarter of FY 2020-21. COAI has stated that it takes around 30-45 days for new subscriptions to impact revenue and therefore the impact of a dip in new subscriptions will be seen only around April end or early May.

Additionally, the lockdown is also likely to delay 5G spectrum auctions and its consequent rollout as network operators are currently focused on meeting increased demand without a dip in service quality. Due to restrictions on manufacturing and movement of goods, this will also limit the ability to roll out 5G enabled handsets.

iii. Impact on tariffs

Even after the last round of tariff hikes late last year, India continues to have the lowest tariff rates in the world. The lower tariffs, as a result of increased competition due to new entrants in the market, led to a situation where the revenues of the incumbent Telcos were considered almost unsustainable for their balance sheets.

Reports indicate that a second round of tariff hikes had been planned in the April-June quarter of 2020, however, given (i) the impact of COVID-19 on spending ability (especially of low income subscribers), (ii) the benefits required to be extended by Telcos (as stated above) and (iii) the dip in subscriptions, the planned tariff hikes may be delayed to the second half of 2020.

TRAI had floated a consultation paper on the need to set floor price (so as to ensure reasonable return on capital) and the COAI had written to TRAI, requesting that an open house be conducted digitally to fix floor pricing. This would, while being within the authority of TRAI, be a departure from the existing regulatory forbearance maintained by TRAI in relation to tariff fixation. The proposed discussions on setting up the floor tariff has been deferred until the current situation eases.

iv. Subscriber Retention

Market share is one of the most important performance metric held closest to the chest by Telcos. Given the challenges of increasing market share in such times, focus would automatically move towards preserving the existing subscriber base. This is most challenging with respect to low ARPU (Average Revenue Per User) subscribers. During this lockdown period, there are reports that Telcos have granted dispensations to their subscribers – like extended validity, additional talk time benefits, etc., as attractions to continue service. TRAI, raising concerns around price discrimination, has, on April 7, 2020, written to Telcos, alleging that they were selectively increasing validity of prepaid users during the lockdown. However, the Telcos have written back to the regulator, contending that they have provided benefits worth at least INR 600 crores to subscribers who are at the bottom of the pyramid to ensure connectivity during this time.

These initiatives would be towards reducing drop-outs for low ARPU subscribers, who otherwise would not necessarily have be in a position to make timely recharges, either due to monetary reasons or access to online recharging facilities. This initiative also helps towards ensuring connectivity of larger masses and for widespread information dissemination, which is critical at this point. This is consistent with the representation by the Telcos to TRAI, where they have stated that if these benefits were offered to an extended pool, this would amount to "an unjustified subsidy" to the customers who can afford these services and cause a steep loss to the industry. Subsequently, TRAI has undertaken a detailed review and has decided not to issue any further directives at present.

v. Power tariffs

Given the increased burden on the existing telecom infrastructure, the Tower and Infrastructure Providers Association (TAIPA), which includes Bharti Infratel, and Indus Towers as its members, has written to various states, seeking relief in power tariffs. The Maharashtra State Electricity Regulatory Commission (MSERC) has proposed to reduce tariffs in the state by up to 10-15 percent. TAIPA has stated that similar relief from other state authorities would support telecom infrastructure providers in the present situation.

vi. Paradigm Swift in Consumer Preference

A major shift in consumer behavior is underway in the wake of the COVID-19 and lockdown measures that are aimed at controlling the spread of COVID-19 pandemic. Higher dependency by the companies and individuals on digital tools such as videoconferencing, webinars, conference calls, etc., are thereby driving up demand for telecom services, which itself is a break of day of a completely new era. The demand for text messages may show a huge decline in view of video calls and voice calls. The schools and educational institutes globally may demand for the contingency plans that encourage distance learning.

Telcos are initiating variety of measures to improve the customer experiences by offering them cost effective tools to attract the customers who are working from home. Several IT companies in India are anticipating to have the work from home policy for their employees even post lockdown, which will change the entire perspective of companies and their preferences from telecom sector.

vii. Network Traffic & Connectivity

Sources state that the overall traffic on telecom sector has witnessed a 10 per cent surge, which gradually has increased to 20% due to the excess use of internet and digital tools due to work from home policies amid lockdown.

Another aspect which needs to be focused on is connectivity issues and call drops. It's very natural that usage of network and internet due to lockdown would be considerably higher than normal times. The telecommunication companies (Telcos) have come forward with the appropriate measures to resolve the issues regarding the connectivity like setting up of Network Operating Centres (NOCs), and virtual war rooms for easy coordination with their team members who are required to maintain their NOCs to resolve the network and connectivity glitches.

D. AGR and other existing issues in the telecom sector

The COVID-19 outbreak and the resultant lockdown has come at a time when the telecommunications sector was already grappling with the issue of payment of Adjusted Gross Revenue (AGR). The Supreme Court had recently rejected the self-assessments of

AGR dues undertaken by a few Telcos and had refused to take up the Centre's submission to allow telecom companies an extended period of 20 years to pay the AGR dues, stating that the matter will be listed in two weeks.

Now, due to COVID-19, there is uncertainty around the listing of the matter in the Supreme Court. However, reports state that as of now, no notices have been sent to the Telcos for AGR dues and the focus of DoT is to ensure smooth operations during the pandemic.

In the event the sought relief is not granted by the Supreme Court, and the Telcos would be required to pay the AGR in full or without any deferment, the financial impact on Telcos could be severe. If the revenues and available cash are not sufficient to pay the license fees (based on the revised interpretation of AGR), Telecos may be forced to consider increasing debt to meet demand. But, given the precarious financial conditions, lenders willing to extend financial assistance will be scarce and cost of borrowing will be higher (as compared to the pre-COVID situation), given the impact on the sector, creating a vicious cycle.

To help the industry and the economy, the RBI has issued certain relaxations to ease repayment and access to working capital, such as a moratorium of three months on payments of all instalments falling due between March 1, 2020 and May 31, 2020.

A recent report by ICRA also indicates that the debt levels in the industry, which moderated to around Rs 4.4 lakh crore as of March 31, 2020, may rise further on account of the AGR dues to almost Rs 4.6 lakh crore.

Other ongoing issues include exemption of GST on licence fee and payment for spectrum acquired in auctions, and exemption from service tax on amount of licence fee payable pursuant to the order of the Supreme Court. While these were ongoing discussions (with the government), the lockdown and the pandemic will lead to a delay in outcome.

E. Outlook and way forward

The general outlook, globally as well as in India, considers the telecom sector to be one of the few that may escape unscathed from the pandemic and the resultant lockdown. The government and all stakeholders are also cognizant of the importance of these services, given the current scenario. We are seeing steps being taken to address short-term issues as and when they come to light. Despite the issues, the increased demand for services may help offset any dip in revenues, especially the high-end subscribers and other people who have been working from home and those who need strong and reliable network to continue functioning.

An additional area where Telcos may be able to help is in assisting the government with outreach and analytics to spread awareness about COVID-19, and to provide anonymised data to the government for analytics, which could be used for developing plans for combating the pandemic. The DoT and mobile phone operators are working to track location details of

calls to closely track movement of COVID-19 patients as well as to monitor migrant labourers to help them with food and employment. Several Telcos have already started taking steps in this direction. Further dialogue between regulators and service providers would go a long way towards, firstly, resolving some of the issues highlighted above, especially considering the importance of the telecom sector today, and secondly, toward developing effective strategies against the pandemic.

CONCLUSION AND ANALYSIS:

The current situation has confirmed the vital role of electronic communications. As long as the current emergency continues, the approach of electronic communications regulators across the globe is to remain vigilant but pragmatic and flexible, especially when it comes to the enforcement of net neutrality, network resilience, emergency communications, and network sharing for 5G rollout.

The current pandemic situation may result into key revolution in the telecom sector. As COVID-19 continues its rampage, certain relaxations and relief measures may certainly act as an aid to telecom sector. Guidelines issues by Reserve Bank of India (RBI) has issued relaxations on repayment of loans by allowing banks to provide the moratorium of 3 months on payment of all instalments in respect of term loans which will help the telecom companies which according to the sources normally owes the debt of 1.5 to 2 lakhs to Indian Banks.

Increasing period of lockdown will seek a flexible and resilient telecommunication facilities to satisfy the increasing needs of companies and individual due to work from home policy. As per a data and analysis of telecom companies, it is also expected that COVID-19 will boost developments in advanced digital infrastructure systems, and may result into the demand of 5G technology.

B. <u>LEGAL AND REGULATORY IMPLICATIONS OF COVID-19 ON SPACE</u> <u>LAWS AND SPACE INDUSTRY</u>

It's been nearly half a century since humans left footprints on the moon and during that time, human space exploration has largely cantered on manned low-Earth orbit missions and unmanned scientific exploration. But now, high levels of private funding, advances in technology and growing public-sector interest is renewing the call to look toward the stars.

The investment implications for a more accessible, less expensive reach into outer space could be significant, with potential opportunities in fields such as satellite broadband, high-speed product delivery and perhaps even human space travel. While the most recent space exploration efforts have been driven by handful of private companies, the establishment of a sixth branch of the U.S. military in 2019—the "Space Force"—along with growing interest from Russia and China, means public-sector investment may also increase in the coming years.

To outline progress in space from both public and private companies, as well as government efforts, the Space team at Morgan Stanley Research has been examining these developments to detail the constellation of potential opportunities for investors.

Growing Public-Sector Interest

While private-equity projects have grabbed most of the headlines in recent years, public-sector interest has also grown. In December of 2019, the Trump Administration established a U.S. Space Command (including a Space Operations Force and a Space Development Agency) with the signing of the as part of the National Defense Authorization Act for 2020. This development will likely benefit the U.S. Defense Department—as well as the aerospace and defense industries—and help focus and accelerate investment in innovative technologies and capabilities.

Then in May of 2020, NASA launched a manned flight to the International Space Station (ISS) on a commercially developed U.S. rocket. The launch represented the first time that the U.S. has flown a manned mission to the ISS since the shuttle program was retired in 2011. It also represents an important milestone for the relationship between private enterprise and the U.S. government in the space domain.

The Global Space Economy

Near term, space as an investment theme is also likely to impact a number of industries beyond Aerospace & Defense, such as IT Hardware and Telecom sectors. Morgan Stanley estimates that the global space industry could generate revenue of more than \$1 trillion or more in 2040, up from \$350 billion, currently. Yet, the most significant short- and medium-term opportunities may come from satellite broadband Internet access.

This chapter reflects on the Coronavirus disease 2019 (COVID-19) pandemic from the perspective of its impact on space business, and of the effectiveness of regulatory structures in place for securing the current economic and contractual commitments of the space sector. This Chapter also focuses on the Legal and Regulatory implications of Covid-19 on Space Laws and Space Industry.

A. Impact of Covid-19 on Authorization of Space Activities:

i. Grounding Licensed Launches:

Space activities, and particularly launching, require authorization at national level, with implementation of further international treaty requirements such as registration, flown down from international to national level. Authorizations for space activities are only granted once the formal investigations and reports on safety, security and environmental compatibility have been completed to the satisfaction of the competent national authorities.

Currently, at least in Europe, whether rocket or suborbital, COVID-19 has had the effect of grounding and/or postponing all forms of launching. This does not, however, hamper downstream space operations such as data processing, software development and further

R&D from continuing with their activities; this sector appears generally to be suffering less from COVID-19s immediate impact.

ii. Advantages of Statutory Provisions for Launch Waivers and Leeway:

Countries with space statutes that specifically cover launch operations as a space activity generally contain provisions to enable experimental or trial phase launches. These provide an initial basis for test trials, without having to undergo the full range of formal readiness compliance and environmental impact reporting required for launching authorization. These may also have advantages from a design and engineering perspective, as well as strategically, particularly in times of crisis. Such provisions could enable essential launches to continue, should specific payloads that contribute to scientific or health studies or environmental capabilities be required within short timeframes, as the crisis may dictate.

With the exception of the US, the effect of the suspension of space launching activities in Europe is effectively a close-down for the space launching business, although, in conditions of minimum air traffic, the time-frame could have provided ideal conditions for experimental flight, and demonstrated the robustness of space operations.

Inspired by the US frontrunners such as Virgin Orbit and SpaceX which continue launch operations during the same period, some European enterprises involved in the newer generation of small launch vehicles attempted to secure waivers or exceptions to allow continuation of their activities, not least in the UK.

B. Ensuring The Robustness of Critical Infrastructure:

i. Scope and Definition of Critical Infrastructure:

Space technology has grown to become a core – and essential – capability for technologically-developed countries. It is deployed in the various sectors upstream, downstream, as well as the rapidly growing sector of space applications, developed generally by less upstream focused companies. Satellite systems, with their global reach and almost unlimited usability, are considered 'critical infrastructure'.

The common denominator across governmental or administrative definitions of critical infrastructures is the essential support for, inter alia, societies' economic and social well-being in areas that are important to the functions of a state and the security of its citizens. In Europe, there are two main Directives relating to systems-criticality, the first being Directive 2008/114 on securing critical infrastructures and improving their protection in the energy and transport sectors.

Directive 2008/114 provides a starting point for Member States to include satellite ground and control stations within the ambit of their legislation on critical infrastructure. The ambiguities in definitions as to what exactly constitutes critical infrastructure have, however, recently led to calls for clarifying the legislation. Directive 2008/114 is now supplemented by the European Directive on Security of Network and Information Systems (NIS Directive)

2016/1148 of 6 July 2018, which imposes duties on Member States to ensure network sensitivity, with cyber-related mechanisms to be put into place and monitored.

ii. Ensuring Continuation of Public and Private Ground Control Operations:

Within the space operations sector, ground control stations are necessary for the conduct of operations in space to deliver signals and data. Control centres interface with the space segment to operate and manoeuvre satellites and collect data. The ownership and operation of space and ground assets in the European space infrastructure is shared between public and private stakeholders, the European statistics differing greatly from those in other countries like the US and Russia.

As a result of the leading position that European satellite operators now occupy in global markets, the number of satellites operated by private entities, in Europe at least, is higher than that operated by public civil and military institutions.

i. Procurement for New Space Applications Following Diversification:

Space companies, following COVID-19 – as with other engineering sectors like the automotive industry – are shifting their focus in the face of crisis towards alternative fields of production where components and equipment are required for use in the medical context. This interface reveals a regulatory level that could benefit from further development into a system for standardization and cross-compatibility. Space agencies actively contribute to space applications directed at health management, ranging from the development of rapidly deployable light, fieldable laboratories which, when deployed with added space assets, support the assessment of bio-threats in the environment, to the development of plexiglass protective shields for the medical and other professions on the basis of 3D-printing technology.

Yet another example of an ESA-backed project is AMAZON, a compact device for vital-sign monitoring and remote diagnosis as part of emergency response. Space technology provides technologies for applications that can break barriers and produce results which other sectors cannot necessarily access so quickly. The industry shows an agility to repurpose in a short space of time. In collaboration with ESA, the UK Space Agency announced new funding for innovative space-enabled technology and services to support the British National Health Service during the pandemic.

These technologies extend to logistics within the health delivery system – such as drone deliveries – the management of infectious disease outbreaks; recovering the health system's functionality; handling backlogs after the crisis; as well as preparedness for future epidemics. Similar initiatives were previously launched by ESA, together with the Italian Minister for Technological Innovation and Digitalization.

The experience of various space-related entities involved covered the full range of space services – satellite communications, satellite navigation, Earth observation satellites and technology derived from human spaceflight. These technologies and services all have specific

capabilities that can respond to natural disasters or, as now, crises such as outbreaks of infectious diseases.

GLOBAL IMPACT:

A. OECD Countries:

As part of the digitalization of the economy, satellite signals and data play an increasingly pivotal role in the functioning of societies and their economic development. Investments in space programmes contribute to drive scientific exploration, knowledge, technology development, and advances in products and services. Several space sector activities, such as space manufacturing and satellite telecommunications, in many OECD countries are designated as national critical infrastructure sectors that are considered essential for the functioning of a society and economy, as well as for the continued safety and well-being of the population.

Over the past decade, the economic importance of the space sector has increased, as new commercial actors have developed innovative products and services highly responsive to market needs with essential localization, navigation and telecommunications applications used around the world. More than 80 countries have now space programmes, with many ongoing space exploration, technology development and earth observing missions (OECD, 2019).

The sector, worth an estimated USD 277 billion in commercial revenues in 2018 (mostly derived from satellite services), is increasingly seen as a driver of innovation and growth in the wider economy. Government investments remains crucial to support the overall space infrastructure, science and R&D, with institutional budgets dedicated to space activities conservatively accounting for some USD 75 billion yearly. In the OECD area, public R&D allocations to civil space activities represent about 7% of total government R&D spending.

During the COVID-19 crisis, space manufacturers and agencies have actively contributed to the response efforts, by producing medical equipment, providing storage and processing capabilities for modelling and other research needs and studying impacts. Space actors have also provided high-speed connectivity to remote locations (e.g. establishing links to remote hospitals, residential and small business customers, and deployment of online solutions schooling)as well as earth observation imagery for industry intelligence and monitoring of remotely located infrastructure.

Certain structural weaknesses of the space industry make it uniquely vulnerable to economic shocks. The space sector comprises a sprawling patchwork of activities, ranging from space manufacturing, rocket launch and satellite operations, all the way to increasingly diverse commercial applications dependent on satellite data and signals, such as consumer broadband.

Certain industry segments, such as space exploration and science, or even satellite manufacturing, are characterised by low production volumes and high levels of specialization, with a limited number of suppliers.

Value chains are increasingly global, but many nations would like to keep some control over sovereign interests and sub-sectors. These segments tend to be populated by small and medium-sized enterprises (SMEs). SMEs generally constitute the bulk of commercial actors in the space sector (e.g. 95% in Canada, 92% in Korea). Furthermore, they often rely on single, mainly government, sources of revenues.

In *Canada*, for instance, sales to government clients accounted for 63% of revenues of earth observation companies in 2018, and a much higher share in space exploration and science. Whereas government contracts have sheltered the industry against short-term impacts of the crisis, there are growing concerns about the medium and long-term effects of the crisis on government budgets and customer demand.

B. European Countries

Showcase for the role of space for crisis management and for the progress achieved by Europe:

Space systems already demonstrated, at various occasions and in different circumstances that they provide unique solutions, essential to better understand, monitor and respond to a variety of crises. The COVID-19 crisis showed that space systems can also be quickly purposed and put to good use even in the case of unforeseen critical situations. It is of course impossible to quantify the contribution of space systems to the mitigation of the crisis impact in Europe, but from a qualitative standpoint it is clear that the situation illustrated well the various roles they play in improving situational awareness, strengthening economic resilience and supporting an adapted response.

As a matter of fact the crisis highlighted the great relevance of European programs such as Galileo and Copernicus, which actively contributed to the response to the crisis and the key role played by national and European institutions that were able, in close cooperation, to quickly support the development of adapted tools such as dashboards and dedicated applications, making full use of new European capabilities.

As compared to other industrial sectors, space is probably structurally more resilient thanks to long-term contracts and backlogs which partially mitigate the impact of temporary disruptions. The central role played by public programs, at least in the upstream segment, also provides some important guarantees through a stable, predictable and sizable demand.

This resilience was further enhanced by the set of measures quickly taken by national and European institutions to ensure business continuity, uphold payment plans and process contractual adjustments. This will likely prevent major financial consequences for public programs, at least in the short-term. The situation is different in commercial markets, on which the European space sector also depends greatly.

While the manufacturing sector suffered the more immediate consequences of the crisis, the crunch of commercial activity on some market verticals, still difficult to predict, may also

impact operators and downstream companies in the medium-term. This might, in turn, continue to affect the manufacturing industry through reduced demand.

Available indicators show that the resilience of the sector has limits and the COVID-19 crisis will lead to a net deficit for the space sector related to productivity loss, reduced turnover and increased costs that should not be underestimated. The sector may also continue to suffer in the longer-term from other impacts such as deteriorated markets or reduced financing capacities among others.

The role of public actors and the place of space in post-COVID Europe

In addition to adapted business strategies from the private sector to cope with the consequences of the crisis, public actors will also play a critical role to facilitate the recovery of the sector.

This will require a tailored and concerted action between public and private stakeholders to elaborate an effective action plan and complement short-term measures taken to ensure business continuity with an adapted long- term strategy. Based on industrial inputs, this strategy should not only address the survivability of the highly regarded space industrial base but also give it the means to tackle the structural difficulties that were arising on commercial markets before the crisis. What is at stake is Europe's capacity to ensure the evolution of its space programs that are unanimously praised for their relevance and invaluable contributions in the current context. This raises also the question of the place of space in the post-COVID European policy agenda.

The COVID-19 crisis is shaking up political lines in Europe and topics such as economic resilience, strategic autonomy, sustainable growth or public safety are rising up in governmental agendas. Space programmes already demonstrated at multiple occasions their specific value and capacity to support all these agenda items. As a matter of fact, the political support for space is high but this support does not always translate into concrete means to achieve the ambitions displayed by European institutions and their Member States.

From this perspective the level of budget that will be allocated to the EU space program for the next multi-annual financial framework will be decisive to accompany industry efforts towards recovery. Therefore, a reduction of objectives and budgets anticipated initially to achieve them would seriously jeopardize Europe's capacity to successfully tackle the challenges that the sector will face, not only as a result of the COVID-19 crisis but also from the overarching tense situation on commercial markets.

The crisis is breathing new life into policy debates in Europe, providing a fertile ground for fresh reflections on long-standing European space policy issues. Beyond the need to address immediate concerns of the sector, the crisis could therefore offer an opportunity to revisit strategic priorities and public action in the domain to position space as an integral component of the post-COVID agenda, for example by:

- giving shape to a technological and industrial policy with a stronger focus on strategic autonomy;
- rethinking accordingly the supply chains and the associated procurement processes as well as the investment, innovation and export policies;
- exploring a more ambitious public procurement of space services to support relevant public action of the EU and its Member States, in particular to boost a sustainable economic recovery;
- emphasizing the role of space diplomacy to better promote European capabilities and know-how.

Raising important questions about European priorities and ambitions in the space sector and putting topics such as industrial policy and space diplomacy under the spotlight, the ultimate outcome of the COVID-19 crisis could very well be an acceleration of long-standing European space policy debates.

INDIA:

The COVID-19 pandemic has led to massive economic problems for India. The economy which was already under considerable strain before the pandemic struck, has been further burdened with the inevitable series of lockdowns. The long-drawn lockdowns exceeding two months have quite plausibly stalled whatever momentum the national economy had.

Hence, it has become important to introduce significant changes to the functioning of the Indian industry. In this context, India's private sector is seen as a key component in the government's push for what has been called as "Atma Nirbhar Bharat" (Self-reliant India). As part of this, the Finance Ministry announced reforms for eight important sectors while delivering the fourth instalment of a Rs. 20 lakh crore economic recovery package. Outer space has been identified as one among the eight areas where major reforms have been rolled out.

Current Developments in Space Law

The participation of Indian industry in space activities has spanned nearly five decades, and the ISRO has been working with approximately 500 private entities, albeit in a limited manner. Private entities have been predominantly engaged in the Indian space sector by means of contractual relations with the DOS through the ACL, the commercial arm of the ISRO, which was incorporated as a wholly owned company by the Indian government in 1992 under the administrative control of the DOS.

Recently, however, the Indian government has been actively encouraging the private sector to participate in Indian space programmes. The ISRO has been doing a significant amount of application-based work in the space sector, which has prevented it from focusing on space research. Thus, by allowing the commercial space sector to participate in Indian space programmes, the ISRO aims to focus exclusively on research and development activities, including developing a human spaceflight programme.

In the past two years, the government has announced the setting up of two new entities to facilitate active participation of private sector players in the Indian space industry. In 2019, New Space India Limited (NSIL) was set up, a public-sector enterprise that has been incorporated as a commercial arm of the ISRO, under the administrative control of the DOS.

The NSIL has been established to commercially exploit the benefits of the research and development carried out by the ISRO and its aim is to move space activities from a supply-driven model to a demand-driven model. The NSIL has been mandated to own and operate satellites, develop launch vehicles, provide launch services and allow transfer of technology.

The NSIL aims to equip the Indian private space industry with the latest space technology so that the space industry as a whole can grow as an emerging market within the global space industry. Its main function is to boost the commercialisation of outer space, and it also acts as a point of contact between the private industry and the ISRO in relation to transfer of technology.

Since it is a commercial entity, its role is important to facilitate international collaborations as it can form a consortium with other commercial entities in the space industry. In June 2020, the government also announced the creation of the Indian National Space Promotion and Authorisation Centre (IN-SPACe). This new entity is intended to serve as a regulator and facilitator for the private space industry with an aim to hand-hold, promote and guide the private space industry in India.

A licensing, authorisation and supervisory regime has been put in place for IN-SPACe to act as a regulator under Article VI of the Outer Space Treaty. It will also act as a facilitator for the private sector as it will assess the demands of the private sector in consultation with the ISRO.

IN-SPACe will also ensure that private companies are positioned on a level playing field in India's space sector. The government has permitted the private sector to use the facilities and capabilities of the ISRO to grow their businesses. The government has stated that, in the near future, it will also allow the private industry to take part in planetary exploration and human spaceflights.

India's human spaceflight mission, 'Gaganyaan', was first announced in 2007 but it never received the required attention from Indian policymakers. However, in August 2018, the Prime Minister commented during his Independence Speech that India would send two astronauts into outer space by 2022, the year in which India will commemorate 75 years of independence.

It was after this announcement that the Gaganyaan programme regained traction. The programme is being undertaken in cooperation with Russia. There was a slight delay in the training of astronauts because of covid-19 but this has now resumed and the launch is scheduled to take place as planned.

One critical issue that the Indian space industry is facing is how Indian registered space companies and foreign registered companies will be treated differently as far as the imposition of goods and services tax (GST) is concerned. If an Indian entity uses facilities provided by the ISRO to launch its satellite, it has to pay GST at 18 per cent. However, foreign registered companies can claim exemption from GST as, under India's GST law, the export of services is exempted from taxation.

One of the preconditions for an activity to be classified as an export of service is that the place where the services are supplied should be located outside India.

Thus, in the case of foreign entities using ISRO launch facilities, the site where services are supplied is specifically considered to be located outside India, which means they are exempted from the imposition of GST.

However, this exemption does not apply to Indian entities. Therefore, any reform of the space sector cannot solely focus on national space legislation – it has to cover other important areas such as tax law and export control law. In a meeting held in October 2020, the Goods and Service Tax Council recommended that the launching services rendered by the ISRO, the ACL and the NSIL be exempted from GST. This has not yet been notified in the Official Gazette.

Another critical aspect of the space sector that deserves significant attention is private space financing. In India, until now, the space sector was predominantly owned and controlled by the government.

However, with the entry of the commercial private sector into the space industry, companies will be able to reach out to the global finance industry for funding, and in future, we might see the growth of the spacecraft or space equipment-leasing industry. Therefore, it is important for the Indian government to have a regulatory regime in anticipation of this. The Cape Town Convention Bill (which will give effect to the Convention on International Interests in Mobile Equipment) is already in the pipeline, with the Ministry of Civil Aviation acting as the nodal ministry.

This may be the right time, therefore, for the government to ratify the Space Assets Protocol and transpose it into the draft national space legislation or, alternatively, include the space aspect in the Cape Town Convention Bill.

Covid-19 and Indian Space Sector:

What would have been an insipid first half of the calendar year 2020 for the Indian space agency turned a bit interesting towards the end, with the government announcing its decision to open up the sector to private participation. At the start of 2020, Indian Space Research Organisation (ISRO) Chairman and Secretary Department of Space K Sivan said that the space agency was planning to have 25 launches -- including Aditya-L1 satellite, Geo Imaging Satellite (GISAT-1), realisation of Small Satellite Launch Vehicle (SSLV) or small rocket (carrying capacity 500 kg), navigation satellite with indigenous atomic clocks and Indian Data Relay Satellite System (IDRSS), and GSAT-20 satellite with electric propulsion.

Sivan also said India will embark on its third moon mission 'Chandrayaan-3' and attempt to land a lander on the lunar surface sometime in 2020-21. All was going well for ISRO after the crashlanding of India's moon lander Vikram on the lunar surface in 2019. The year began well ISRO with the launch of the 3,357 kg communication satellite GSAT-30 by the European space agency Arianespace rocket Ariane 5 on January 17. The ISRO also showcased its robot/half-humanoid -- Vyommitra - which was part of its human space mission programme 'Gaganyaan'.

The first setback of the year for ISRO came on March 4, when it had to call off the launch of GISAT-1, a day before its actual launch, owing to technical reasons. Then came the COVID-19 lockdown within and outside India that had its cascading impact on ISRO's core plans like the realisation of SSLV, launch of GISAT-1, delay in the first test-flight of the rocket as part of Gaganyaan mission. It is also not known when ISRO will be able to restart its satellite launch operations. With coronavirus infection spreading fast in the county, ISRO also started work on developing a low-cost ventilator and sanitiser.

Meanwhile, two positive developments happened for ISRO -- securing an Indian patent for its liquid cooling and heating garment (LCHG) suitable for space applications and for its method of manufacturing highland lunar soil simulant or simply lunar/moon soil.

On May 16, Union Finance Minister Nirmala Sitharaman announced that Indian private sector will be a co-traveller in India's space-sector journey and a level-playing field will be provided for them in satellites, launches, and space-based services. She also said that a predictable policy and regulatory environment will be provided to private players.

The future projects for planetary exploration, outer space travel and others are to be opened up for the private sector, adding there will be a liberal geo-spatial data policy for providing remote-sensing data to tech-entrepreneurs subject to various checks.

Welcoming the announcement, sectoral experts suggested various models for restructuring of ISRO and also urged the government to set up an independent regulator and also enact necessary legislation. On June 24, the Union Cabinet decided to set up Indian National Space Promotion and Authorisation Centre (IN-SPACe), making ISRO to focus on research and development (R&D) of new technologies, exploration missions, and human spaceflight programme.

Establishing an independent regulator could allow a systematic review and reforms on a continuous basis rather than one-off announcements, Prasad said. As per current scheme of things, IN-SPACe will have its own directorates for technical, legal, safety and security, monitoring as well as activities promotion for assessing the private sector's needs and coordination of the activities.

SPACE IN 2021:

2020 was certainly a challenging year for many around the world to meet the challenges of Covid 19. Despite this, outer space activities have gained wide public attention. SpaceX's Dragon spacecraft named Resilience launched in November with a crew from NASA. China's

Chang'e–5 mission launched an unmanned craft to the moon in order to collect samples. This is the first-time samples have been collected from the moon for over 40 years.

In addition, a recent Japan Aerospace Exploration Agency capsule returned to Earth after collecting samples from an asteroid. NASA also announced in October that water had been discovered on the moon. Further, China is progressing a mission to Mars. This renewed and substantial interest in outer space activities is driven in part by governments but also private entities.

The ability to launch modern small and powerful satellites is perhaps the more obvious commercial reason for engaging in space activities. Worldwide communication coverage using satellites to distribute data is not just about meeting the world's continuous need for greater data exchange, broadband activity, and voice calls, but also relates to the role of military or security activities from space-related hardware.

A small number of treaties provide the legal governance for outer space activities. The first was the Treaty on the Principles Governing the Activities of States in the Exploration and Use of Outer Space 1967. This 'Space Treaty' was supplemented by three further Treaties and then in 1979 and Agreement Governing the Activities of States on the Moon and Other Celestial Bodies.

National laws also supplement outer space law by those countries which engage in spacerelated activities. Aside from national laws, the five international Treaties still provide the basis for the legal governance of outer space activities.

However, given these recent developments discussed above it's unlikely that the limited old treaties are sufficient. The reality is that the law governing outer space activities is very much in its infancy, but is developing and will no doubt need to develop substantially in the coming years.

The regulation of a space tourism sector could become a reality in a relatively short space of time given the SpaceX and Virgin Galactic space plane developments in that area. The discovery of water on the moon and recent gathering of samples also leads to the question of the exploitation of natural resources in outer space and the legal implications.

The international trade aspects of outer space cannot ignore environmental responsibility not just for the exploitation of natural resources, but also responsibility for dealing with the current widespread space debris from previous launches, as well as decommissioned satellites. Increased reliance on international data transfers also raises the question of cyber operations from facilities on earth through outer space, as well as the governance of intellectual property law data gathered by space-related activities.

All of this, of course, needs to be considered in the context of applicable dispute resolution procedures, applicable law as well as the applicable forum for any dispute resolution activities. Currently, those disputes will be resolved by reference to the laws and procedures of applicable jurisdictions, so bringing us all back to earth at least in the legal context.

ANALYSIS AND CONCLUSION:

COVID-19 is a new Pandora's box. While the COVID-19 crisis requires us to reflect on how society's risks are to be managed securely in future, the resilience and benefits to be gained from space-based and space-derived applications are not to be overlooked.

The space agencies are doing their utmost to maintain programmatic input and sustain space business, implementing programme schedules, whilst retaining high levels of coordination in international collaboration projects on earth and in outer space, including on the ISS. It is too early in the crisis for the exact commercial impact of COVID-19 on space business to be finally assessed.

Initial prognoses reported a pessimistic impact on the aeronautics sector, with recovery predicted as at 2019 level only as of 2023. Economists, meanwhile, encourage governments to minimize the losses, lest the lack of action leads to greater economic harm. Indeed, this is part of the rationale for their very existence.

This message is important, when considering the impact of COVID-19 on space-related contracts that can neither be performed in a timely manner, nor to the full extent: space-related activities fall directly within the notion of essential facilities, services without which society is unable to operate and which should be protected from the constraints of open and free market competition. This puts an additional onus on the state in supporting space-based services in times of crisis.

Without operational space capabilities, states could lose control over entire infrastructures for national communication, transport, finance and utilities.

Currently, despite the suspension of many launches and the reduction of manpower to skeleton teams following health restrictions, the space operations and business sector is proving its resilience and versatility in other ways. Its responses to the COVID-19 crisis show that space technology is helping to make the difference.

Just as satellites and space technology offer solutions in connectivity and inclusion in less extreme times, they are suitably placed to do this even more so in times of crisis. Resilience and logistics are part of their core characteristics. It would be a great testimony to the space sector if it can continue to mark leadership and progress through its interdisciplinary approach. It has led breakthroughs in the past, and could contribute further by leading societal transformation as to how the environment is managed.

There may also be merit in exercising caution when drafting *Force majeure* clauses to avoid premature over-reliance on their application. Parties can notify their partners of impediments and continue to work towards an adjustment of the impact of COVID19-related restrictions in the individual case. If space contracts, including those in the downstream business, are not to be fulfilled, then future developments, particularly those delivering added value into Sustainable Develop Goal 3, could suffer as a result.

By the year 2021, human space flight will have spanned a period of sixty-one years. Europe has secured its own standardization processing in the shape of the European Cooperation for Space Standardization. COVID-19 may contribute to making the case for securing a parallel or cross-compatible system for certifying space-derived applications across the health-related field.

Now is the time to examine the synergies and inter-operability that could possibly be achieved. The legal tools currently in place for regulating space activities, particularly those regarding ultimate roles and duties of states, as well as allocating risk, should be relied on as facilitators to build bridges of efficiency, with the foresight as to what is required for other crises that risk an aftermath equivalent to COVID-19.

Further thought can be given to cross-compatibility and agile certification, with new norms where required. Contract law, with its doctrine of *Force majeure*, carefully drafted, would allow research and development to continue and supplies to be managed, despite crisis-related delays or impediments.

In India, With the approval of the draft Space Activities Bill, which aims to provide a licensing and regulatory framework for the Indian space industry, we expect to see the entry of various private players that will shape the Indian space sector in the coming decades, although we will have to wait and see what position the Indian government will take on specific provisions of the Bill.