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COVERED OR NOT COVERED: THAT IS THE QUESTION

- Services Classification and Its Implications for Specific Commitments under the GATS

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ABSTRACT:

The GATS does not offer a definition of "services", but services need to be identified and classified for the operation of the Agreement, especially for the scheduling of specific commitments on market access and national treatment. There is no obligation on WTO Members to use any particular classification system in undertaking commitments. Nevertheless, an informal document produced for the services negotiation during the Uruguay Round, the Services Sectoral Classification List (W/120), was used and continues to be used as the principal guiding classification system, not only in the WTO, but also in bilateral and plurilateral services trade negotiations outside of the WTO. WTO jurisprudence has also noted the role of W/120 in the determination of sectoral coverage of GATS commitments. However, services classification does not receive enough attention it deserves. This paper attempts to make contribution by providing an overview of services classification and highlighting its relevance to both trade negotiations and WTO dispute settlement. It consists of four sections. Section I reviews how a services classification system was introduced into the multilateral trading system and describes the main features of W120. Section II takes a closer look at some aspects of the classification system, drawing attention to challenges in its application, which arise from inter alia services with multiple end-uses, overlaps between sectors, and the issue of "new services". Section III considers the implications of classification on GATS commitments by examining a number of WTO dispute settlement cases. Section IV concludes. In conclusion, the paper underlines the importance of services classification in assisting governments in clearly and accurately undertaking commitments. It also notes that WTO Members have taken or suggested various pragmatic approaches to addressing challenges in the application of the current services classification system. The proposed approaches again highlight the role of classification in ensuring the clarity, certainty and predictability of specific commitments in services.

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The General Agreement on Trade in Services (GATS) does not offer a definition of "services". Instead, it creatively defines trade in services as the supply of services, which may take place in four modes: cross-border supply, consumption abroad, commercial presence and the presence of natural persons. This definition is essential for the operation of the Agreement as it provides significant flexibility to WTO Members in undertaking market access and national treatment commitments. While the absence of a definition of services may not necessarily be inconvenient for the operation of the GATS, services need to be identified and classified, because specific commitments are inscribed in the schedule on a sectoral basis. Article XVI:2 (Market Access) starts with "In sectors where market access commitments are undertaken, ....". By the same token, Article XVII (National Treatment) states: "In the sectors inscribed in its Schedule…". Moreover, a number of important general obligations under the GATS apply only to "sectors where specific commitments are undertaken".\(^1\) Apparently, in the context of the GATS, services need to be described in the form of "sector" for the purpose of scheduling specific commitments. The sectoral description in the schedule defines the coverage of relevant commitments undertaken, and therefore matters. Even for the general obligation of the Most-Favoured-Nation Treatment which applies to any measures affecting trade in services, regardless of whether or not services are listed in the schedule, it appears also necessary to identify the service concerned as it is about the treatment accorded to like services and service suppliers among Members.\(^2\) However, the GATS itself does not provide guidance on how services should be classified or how sectors should be described in the schedule.

The need to classify services for trade negotiations was recognized at the very early stages of the Uruguay Round. In the 1988 Montreal Ministerial Declaration, the GATT Secretariat was requested to prepare the compilation of a reference list of sectors as part of future work on services trade negotiations. The outcome of this work was an informal Secretariat Note, the Services Sectoral Classification List (MTN.GNS/W/120), which served the negotiations on trade in services throughout the Uruguay Round. It consists of eleven broad sectors as well as a residual category "Other Services Not Included Elsewhere". Further, it is divided into over 150 subsectors. As it is intended to be comprehensive, each sector and various sub-categories include a residual range of "Other" services. Subsectors in the list, where possible, are annotated with relevant numbers of the 1991 Provisional Central Product Classification (the CPC). The latter was prepared by the United Nations for the purpose of trade statistics. With the CPC references in W/120, the corresponding explanatory notes of the CPC then describe what is covered by the listed services.

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\(^1\) E.g. Article VI:1, 3, 5, 6; Article XI:1 of the GATS.

\(^2\) Article II:1 of the GATS: "With respect to any measures 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."
W/120, therefore, is not a mandatory classification system under the GATS. There is no obligation on WTO Members to use any particular classification system in undertaking specific commitments. This turns out to be different from the case of goods trade where, despite the absence of any mandatory goods classification under the GATT, to follow the Harmonized System (HS) classification is an obligation of WTO Members in their capacity as members of the World Customs Organization which develops the HS. Nevertheless, almost all WTO Members have followed the structure of W/120 when scheduling their services commitments, and most of them have used the CPC in defining the sectoral coverage of their commitments. There are indeed a number of Members who have opted not to include any CPC references in their schedules. This does not affect the shared view that "a common format for schedules as well as standardization of the terms used in schedules is necessary to ensure comparable and unambiguous commitments". WTO jurisprudence has also noted the importance of W/120 in the determination of sectoral coverage of commitments. While WTO Members continue to use W/120 as a reference classification in the current services negotiations and the scheduling of commitments, they also realize the inadequacy of this system in reflecting new market realities in many sectors, particularly in view of technological developments. Since its first meeting held on 24 May 1996, the WTO Committee on Specific Commitments, a body tasked to ensure technical accuracy and coherence of commitments, has been engaged in technical work to examine this issue. The process shows that services classification is technically highly complicated and that its implications cannot be underestimated. Meanwhile, some Members have already chosen to deviate from W/120 and the CPC in certain sectors when making commitments or tabling offers. Divergence among Members in describing service sectors may make comparison and evaluation of schedules more difficult than it need be. In the context of progressive liberalization, consistency in classification should also be taken into consideration when making new commitments. Within one schedule and/or a sector, switching from one classification approach to another may change the coverage of commitments inadvertently and then raise the question of the relationship between "old" and "new" of commitments because it is understood that a Member's "new" commitments shall not undermine its existing commitments unless it has followed the procedures under Article XXI of the GATS, which is the provision about the modification of schedules.

It should be noted that the "GATS classification system" (i.e. W/120 + CPC) is so far the only services classification created for the purpose of trade negotiations. While over 24 years old, it continues to serve this purpose not only within but also outside of the WTO. The last decade has seen

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3 Paragraph 1 of the Guidelines for the Scheduling of Specific Commitments under the GATS (WTO document S/L/92).
a proliferation of regional trade agreements on services; most of them do not bother to seek for a substitution of the GATS classification system. Despite its importance, the system does not get the attention it deserves, in particular when digital technologies are profoundly affecting trade in services and make services classification more challenging. This paper attempts to make contribution by providing an overview of service classification and highlighting its relevance to both trade negotiations and WTO dispute settlement. Section I reviews how a services classification system was introduced into the multilateral trading system and describes the main features of W120. Section II takes a closer look at some aspects of the classification system, drawing attention to challenges in its application. Section III considers the implications of services classification on GATS commitments by examining a number of WTO dispute settlement cases. Section IV concludes.

I. A CLASSIFICATION SYSTEME CREATED FOR SERVICES TRADE NEGOTIATIONS

The GATS classification system was not created from scratch. When the GATT Secretariat was tasked to prepare a reference list of services sectors to assist countries in undertaking negotiations during the Uruguay Round, there were a number of international services classification systems in existence or under development. These systems were established for the purpose of collecting economic data, but they were considered to be able to serve as a basis for developing a reference list for negotiations on trade in services. The following question was then which system should be used. The systems under consideration could generally be divided into three types: transaction-based such as the IMF Balance of Payments (BOP) classification; activities-based with the International Standard Industrial Classification (ISIC) as the prime example; and products-based as represented by the Provisional Central Product Classification (CPC).

In developing its recommendations on what kind of system would be appropriate for the needs of the (then) Group of Negotiations on Services, the GATT Secretariat made an evaluation of the strengths and shortcomings of the main international classification systems. According to the GATT Secretariat, the focus of transaction-based classifications was on cross-border transactions and consumption abroad involving flows of foreign exchange and, unlike activity- or product-based systems, they were not designed to fully capture the universe of commercially supplied services. Activity-based classifications were considered to be incomplete in terms of statistical coverage of trade in services because recorded activities might not correspond with the actual production of services. For example, in the ISIC, the output of a manufacturer of a certain product, which also provided transportation, maintenance and repair services, were allocated to the sector that constituted its primary sphere of

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4 GATT document MTN.GNS/W/50.
activity - i.e. the manufacturer of the particular product. Product-based classifications were closely related to activity classifications as products were typically the outputs of specific activities. The GATT Secretariat opted for a product-based classification for the following reasons. First, it could provide a greater degree of disaggregation than an activity-based system as there were more identifiable products than activities. For example, the CPC distinguished nearly 600 service products in contrast to 300 services activities under ISIC. Second, services that required factor movement to be provided internationally (e.g. movement of labour and capital) could be captured in a product-based classification to the extent factor flows actually produced a service product; utilization of a product-based classification might also allow foreign provision to be related to domestic production. In other words, all modes of supply would be covered. Third, a product-based classification could meet the objective of achieving the highest degree of concordance with existing systems for recording statistics on services trade and production. Indeed, it is ultimately service outputs (what is traded), and not the activity that generates the outputs (who is trading), which enter international trade and which are the subject of market access commitments. This is probably the essential consideration underlying the design of the GATS classification, which, however, tends to be overlooked afterwards.

The CPC was then chosen as the basis for drawing up the proposed reference list of services sectors during the Uruguay Round, for the sake of its implicit coverage of all modes of supply and its highly disaggregated nature. From the perspective of negotiations, another important advantage of the CPC lies with its explanatory notes which contain a sufficiently detailed description of a broad spectrum of outputs or "service products" of heterogeneous service industries and thus can help delineate with some precision the scope of specific commitments. This would largely facilitate the work of trade negotiators.

The reference list, drawn up by the GATT Secretariat, so-called W/120, was distributed to the Uruguay Round delegations in July 1991 to assist negotiations on trade in services. As indicated at the beginning, it is a streamlined classification consisting of 12 categories and over 150 sub-headings. On the surface, W/120 appears much more aggregated and less detailed than the CPC. Since it contains CPC concordances for the majority of its sub-headings and the CPC is a hierarchical, multi-level structure, W/120 actually allows for a much higher degree of disaggregation and precision in application when needed. This was confirmed by the Appellate Body which in the dispute United States - Gambling observed: "[a]s the CPC is a decimal system, a reference to an aggregate category must be understood as a reference to all of the constituent parts of that category. Put differently, a reference to a three-digit CPC Group should, in the absence of any indication to the contrary, be understood as a reference to all the four-digit Classes and five-digit Sub-classes that make up the..."
group; and a reference to a four-digit Class should be understood as a reference to all of the five-digit Sub-classes that make up that Class.\(^5\)

In addressing the issue of how to describe committed sectors and sub-sectors in the schedule, the 1993 Secretariat's Explanatory Note on the Scheduling of Initial Commitments in Trade in Services (the so-called "1993 Scheduling Guidelines") urged governments to use W/120 to the extent possible when scheduling services commitments. It indicates:

The legal nature of a schedule as well as the need to evaluate commitments, require the greatest possible degree of clarity in the description of each sector or sub-sector scheduled. In general the classification of sectors and sub-sectors should be based on the Secretariat's revised Services Sectoral Classification List. Each sector contained in the Secretariat list is identified by the corresponding Central Product Classification (CPC) number. Where it is necessary to refine further a sectoral classification, this should be done on the basis of the CPC or other internationally recognised classification (e.g. Financial Services Annex). The most recent breakdown of the CPC, including explanatory notes for each sub-sector, is contained in the UN Provisional Central Product Classification.

If a Member wishes to use its own sub-sectoral classification or definitions it should provide concordance with the CPC…. If this is not possible, it should give a sufficiently detailed definition to avoid any ambiguity as to the scope of the commitment.

Building upon this Secretariat Note, in 2001, the Council for Trade in Services of the WTO adopted the Guidelines for the Scheduling of Specific Commitments under the GATS (the Scheduling Guidelines) with a view to assisting Members in the preparation of offers, requests and national schedules of specific commitments in the first round of negotiations after the entry into force of the GATS. The two above-cited paragraphs were reproduced in the new Scheduling Guidelines.\(^6\)

Apparently, the need for consistency and comparability across schedules requires a common

\(^5\) Appellate Body Report, United States - Measures Affecting the Cross-Border Supply of Gambling and Betting Services, WT/DS/285/AB/R, para. 200. Original Note on the decimal system: "The CPC hierarchy consists of Sections designated by one-digit codes, Divisions designated by two-digit codes, Groups designated by three-digit codes, Classes designated by four-digit codes, and Subclasses designated by five-digit codes."

\(^6\) It should be noted that there exist some obvious discrepancies between W/120 and the CPC. Some sectors (e.g. code and protocol conversion, sound recording) in W/120 have no CPC correspondences; some CPC codes in W/120 do not make sense under the GATS as they appear to refer to the services that do not fall within the scope of the Agreement, such as CPC 95 - "services of membership organizations" which include political and religious organization; there are also some commercial services that are referred to in the CPC, but somehow overlooked in W/120, such as retail sales of motor fuel (CPC 613).
classification to be followed by all Members in the scheduling of commitments. On the other hand, it is also recognized that Members should be given certain flexibility in the utilization of classification to serve their scheduling needs. The approach taken in the Scheduling Guidelines is intended to strike a balance between the twofold needs. Permitting derogations from the common classification not only reflects the complexity and diversity of services but also recognizes the imperfections that may exist in W/120.

Actually, upon or shortly after the conclusion of the Uruguay Round, alternative or supplementary classifications of a number of key services sectors were introduced under the GATS, including financial, telecommunications, maritime and air transport services. The Annex on Financial Services contains a classification of financial services without the CPC concordances. The classification of telecommunication services in W/120 is supplemented and further refined by the Notes on Scheduling Basic Telecoms Commitments that emerged from the WTO negotiations on basic telecommunications and introduced a "technology neutral" approach. A model schedule was developed in the negotiations on maritime transport, which suggests scheduling commitments in three defined "pillars" of the sector: international shipping, auxiliary services and access to and use of port facilities. There are important differences between the coverage of the maritime model schedule and the definition of maritime transport in W/120. The Annex on Air Transport Services replaces the classification of the sector in W/120 as it excludes from the application of the GATS all traffic rights related services and defines the three covered sub-sectors (aircraft repair and maintenance services, selling and marketing of air transport services and computer reservation system services). In addition, some Members have chosen to use their own classification or definitions to describe commitments in various sectors/subsectors.

Derivations from a common classification system from the beginning of the GATS may suggest Members' concern or lack of confidence with the system's adequacy in fully capturing and reflecting the universe of services, due to rapid and constant development in services. When the WTO Committee on Specific Commitments, at its "inaugural" meeting in 1996, tasked the Secretariat to "carry out analytical work in the area of sectoral classification", it already indicated that this was because "the service sectoral classification was quite possibly incomplete and out of date". Since then,

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7 Specific commitments often reflect the scheduling Member's trade policy and regulatory considerations and thus the description of service sectors in the schedule may sometimes have to deviate from the common classification to accommodate such considerations. In doing so, the scheduling Member needs to ensure its description of services in the schedule to be clear and unambiguous as indicated in the Scheduling Guidelines.

8 The differences between W/120 and the Annex on the classification of financial services, please see the Background Note by the WTO Secretariat S/C/W/312, S/FIN/W/73, p. 41-43.


10 WTO document S/CSC/M/1, p.2.
examining services classification and related issues has been a standing item on the agenda of the Committee with a view to achieving a clearer, more accurate and more comprehensive description of services for the purpose of future trade negotiations. The exercises undertaken in the Committee highlight the challenges in continuing to apply the current GATS services classification in many aspects. This should not be a surprise to the drafters of W/120 as they had indicated that W/120 "could be subject to further modification in the light of development in the services negotiations and ongoing work elsewhere". But they may have underestimated the difficulties in modifying or updating W/120 afterwards. While W/120 remains unchanged since 1991, the CPC, the source and annotation of W/120, has been revised and updated several times. The latest two versions of the CPC, i.e. CPC version 2 and version 2.1 were published respectively in 2008 and 2015. Each new version of the CPC states in its introduction that "all previous draft versions become obsolete". Compared with the provisional version of 1991, the latest two versions contain important changes, in particular related to fast developments in services. In this context, one may naturally wonder whether W/120 is still adequate to serve current and future services trade negotiations as it is based on the Provisional CPC of 1991.

II. DEVIL IS IN THE DETAILS: CHALLENGES IN THE APPLICATION OF THE GATS SERVICES CLASSIFICATION

W/120 is designed as a tool to facilitate trade negotiations on services, and in particular to assist governments in undertaking commitments under the GATS. Its advantages have been generally recognized: disaggregated, comprehensive, or even exhaustive, but the devil is always in the details. The challenges in the application of W/120 are those "details" that are considered to be inadequate in ensuring clarity and unambiguity of commitments in general and today in capturing new market realities particularly. Awareness of these challenges is necessary, given that W/120 is being and will continue to be used in trade negotiations.

1. What are the criteria for classifying services?

As mentioned, the classification of W/120 and the CPC is based on service outputs, i.e. products. The Introduction to the 1991 Provisional CPC indicates that the categories for goods are based on the physical properties and the intrinsic nature of the products, as in the Harmonized System.\textsuperscript{11} It is however silent about the criteria for the categorization of services.\textsuperscript{12} Since services are

\textsuperscript{11} Provisional Central Product Classification, the United Nations, 1991. Paragraph 21 of the introduction further explains: "the expression "physical properties and intrinsic nature" means criteria that are proper to the goods themselves, e.g. the raw materials of which they are made, their stage of production, the way
intangible, they cannot be classified based on their "physical properties". Nevertheless, the "intrinsic nature of the products", i.e. inherent and essential characteristics that distinguish one service from another, could be the basic criterion for the classification of services.

What then would be the main elements that constitute the intrinsic nature of a service? There is no clear answer to this question. The industrial origin, production method or means of delivery does not appear "intrinsic" to a service as these criteria are about who produces a service or how a service is produced, thus more or less "extrinsic" or "acquired". The intended end-use might serve as an important criterion for the determination of the intrinsic nature of service outputs. This understanding seems to be supported by the classification of most services in W/120 and the CPC. Based on this understanding, for example, saving and lending services provided by postal offices, motor vehicle financing services by motor vehicle distributors, money card services by retailers, payment services by internet companies, or banking services by mobile operators, these services are all by nature financial services, irrespective "who is providing the services" or "industry origin". As a result, an enterprise engaged in multiple activities may be supplier of different services, depending on the nature of its various products. For instance, in some countries, a postal office may be s supplier of postal services, retail services, financial services, even telecommunication and logistics services.

Classifying services based on their intrinsic nature is also in line with the principle of technological neutrality which means the technology involved shall not affect the classification of services as long as the nature of services remains unchanged. Take voice telephone services as an example, the fact that different transmission technologies (e.g. cable, wireless, satellite) may be involved in the provision does not change the nature of the final output, voice telephony. Today, information technologies are widely applied in services and have enabled a wide range of activities, such as telediagnosis, online retail sale, online gambling, online advertising, e-banking, e-billing, e-archives, etc. In most cases, the application of information technologies appears to simply provide new means of delivery for services rather than create new services as they do not change the intrinsic nature of service outputs.

12 In the latest version of the CPC, CPC Version 2.1, the classification principles are described in a way that goods and services are referred to together as "products". It states: "The CPC classifies products based on the physical properties and the intrinsic nature of the products as well as on the principle of industrial origin." Central Product Classification (CPC) Version 2.1, para. 6 of the Introduction, ST/ESA/STAT/SER.M/77/Ver.2.1, United Nations, New York, 2015.
Although it is made clear that W/120 and the CPC treat services as products, the system also contains a number of incoherencies, which may sometimes create confusion. A typical example of incoherence is the classification of postal and courier services which is based on the nature of the service supplier rather than the nature of the service supplied. Postal services refer to mail and parcel delivery services provided by the national postal administration, while similar services rendered by other operators are classified as courier services. This classification has been pointed out to be inadequate in capturing the market reality in the postal sector where the distinction between postal and courier services is getting blurred as many countries have undertaken postal reforms including privatization, or at least transforming the national postal administration into a commercially independent corporation which compete with private operators in most delivery services. Further, there are some other sub-classifications in W/120 which are also associated with "who is trading", such as "Services provided by midwives, nurses, physiotherapists and para-medical personnel" or "Freight transport agency services". In some other cases, the definition of the service product is linked to the nature of the service supplier, such as "Travel agencies and tour operator services" or "Tourist guides services".

Another interesting example of somewhat departure from the classification based on the nature of a service in W/120 is the distinction between medical services provided to in-patients, on the one hand, and similar services to out-patients, on the other hand. The former falls under hospital services, while the latter is covered by another category "medical services". It appears that the distinction is based on how consumers - patients- are billed and not on the nature of the services provided. But it may also create confusion in application leading to lack of clarity in commitments. For example, some Members have inscribed their commitments on hospital services under "medical services" in the sub-section of professional services.

When a given service product may serve multiple end-uses, the classification of services would become less straightforward because it may depend on what the essential end-use is. For example, neither W/120 nor the CPC contains a category of pharmacy services; it has been argued that the services provided by pharmacists cannot be adequately captured by "Retail sales of pharmaceutical, medical and orthopaedic goods", the only relevant category in the existing system, because services provided by pharmacists are more sophisticated than the sale of medicine. Similar examples are identified in other sectors as well, in particular today with the convergence of computer, telecommunication and audiovisual services. Discussions about the classification of entertainment

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14 See Postal and Courier Services, Background Note by the Secretariat, WTO document S/C/W/319, 11 August 2010.
software or online games illustrate the complexity of the issue involved. Suppose we could agree on applying the GATS to online games, it has been pointed out that possible GATS sub-classification may range from no available category to the classification under computer and related services, to value added telecommunication, entertainment, or audiovisual services. There are also advertising online games which are either specifically designed for advertising purposes or with advertisements inserted therein. Are those online games advertising services or audiovisual services or other services, or even a combination of several services? Suppose we could agree that the classification be based on the essential end-use of the service, from whose perspective should the essential end-use be determined, producer, consumer or regulator?

Services of multiple end-uses also suggest that there may be overlaps between services, from which arises the issue of how to draw the delineation line between sectors, though the categories in W/120 and the CPC are assumed to be mutually exclusive.

2. **Where to draw the delineation line between sectors?**

Given that W/120 and the CPC is intended to be exhaustive, presumably any service should automatically fall under somewhere in the list. As indicated above, sometimes there is no easy answer as to where a service should be placed, especially for those services that are not explicitly mentioned in W/120 and the CPC. In practice, the application of this classification system raises various questions: Is it possible that a service could fall under two or more sectors or sub-sectors? Is it always conceivable to draw a clear-cut delineation line between sectors or sub-sectors? How should composite or compounded services be classified, which consist of a combination of different services?

In theory, W/120 and the CPC are considered to be exhaustive, and the categories therein mutually exclusive. The Appellate Body in *United States - Gambling* confirmed this observation. It highlights the mutual exclusivity of sectors or subsectors inscribed in a schedule as it stated:

To us, the structure of the GATS necessarily implies two things. First, because the GATS covers all services except those supplied in the exercise of governmental authority, it follows that a Member may schedule a specific commitment in respect of any service. Secondly, because a Member's obligations regarding a particular service depend on the specific commitments that it has made with respect to the sector or

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A subsector within which that service falls, a specific service cannot fall within two different sectors or subsectors. In other words, the sectors and subsectors in Member's Schedule must be mutually exclusive.\(^{17}\)

The Appellate Body further explained that "if this were not the case, and a Member scheduled the same service in two different sectors, then the scope of the Member's commitment would not be clear where, for example, it made a full commitment in one of those sectors and a limited, or no, commitments, in the other."\(^{18}\)

Mutual exclusivity of service sectors makes sense for the operation of specific commitments. But in classification practice, as certain goods may be arguably classifiable under more than one heading in the HS, some services could also arguably fall under two or more categories. Contrary to "mutually exclusive", in W/120 and the CPC, some services classified in one sector or subsector may overlap with some other services classified in another sector or subsector in terms of their end-uses or functions. Similar to multifunctional goods, many services are offered in combination and have multiple end-uses, in particular today's ICT-related services with the application of new technologies. In addition, some services are inputs to other services and thus embedded in the latter; or they are subordinate to other services and enable the provision of the "principal" services.\(^{19}\) The relationship between services seems more complicated than being "mutual exclusive" and thus may pose challenges to the application of the classification system.

Many ambiguities in W/120 and /or the CPC relate to the difficulty of drawing the delineation line between service sectors or subsectors. One example is the overlap between courier services and transport services as far as mail transportation is concerned.\(^{20}\) Another example is that "Adult education services" overlap with "Other education services" as they are all about education services that are not definable by level.\(^{21}\) Also, it is difficult to tell where freight brokerage services should fall because they are explicitly referred to in the definition of both "Freight transport agency services"

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\(^{17}\) Ibid. para. 180.

\(^{18}\) Ibid, original footnote 219.

\(^{19}\) Paragraph 25 of the Scheduling Guidelines states: "It is understood that market access and national treatment commitments apply only to the sectors or sub-sectors inscribed in the schedule. They do not imply a right for the supplier of a committed service to supply uncommitted services which are inputs to the committed services." Some Members in their PTA schedules take similar lines, for example, Switzerland indicates in its schedule (e.g. EFTA - Chile): "The level of commitments in a particular services sector shall not be construed to supersede the level of commitments taken with respect to any other services sector to which such service is an input or to which it is otherwise related."

\(^{20}\) Postal and Courier Services, Background Note by the Secretariat, WTO document S/C/W/319, 11 August 2010, para. 8-9.

\(^{21}\) Education Services, Background Note by the Secretariat, WTO document S/C/W/313, 1 April 2010, para. 7.
"Other supporting and auxiliary transport services" (CPC 749).22 A likely interesting case of overlap relates to advertising services. Advertising Services (CPC 871) are listed in W/120 as a sub-category of "Other Business Services", which is made up of three sub-categories in the CPC: "Sale or leasing services of advertising space or time" (CPC 87110), "planning, creating and placement services of advertising" (CPC 87120), and "Other advertising services" (87190). However, under audiovisual services, the sub-category "Motion picture and video tape production and distribution services" (CPC 9611) embraces a sub-class "Promotion or advertising services" (CPC 96111) which is not further defined. There may be divergent interpretation of the latter and thus lends uncertainty to the scope of CPC 871, which may have implications for the determination of the coverage of relevant specific commitments.23

There are important overlaps between computer services, value-added telecommunication services and audiovisual services, which raise serious classification issues.24 It may be interesting to note that "Data processing services" (CPC 843) appear twice in W/120: under both the heading "Computer and Related Services" and the heading "Telecommunication services". According to the "mutually exclusive" theory, data processing as computer-related services should be different from data processing as telecommunication services. But then what is the distinction between them, especially if they share the same CPC reference? While a pragmatic way to deal with the problem is to make consistent commitments so as to avoid conflicting obligations, this is certainly not the optimal solution. An additional complication is that some Members have undertaken inconsistent GATS commitments on data processing in the two sectors, which may entail conflicts in implementation, and cause difficulties in having a common understanding of how such conflicts should be interpreted.

In view of possible overlaps between sectors/subsectors, the explanatory note of the Provisional CPC suggests some general rules guiding statisticians to use the classification system: 1) the category which provides the most specific description shall be preferred to categories providing a more general description; 2) composite services shall be classified as if they consisted of the service which gives them their essential character; 3) when services cannot be classified by reference to the

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22 Logistics Services, Background Note by the Secretariat, WTO document S/C/W/317, 10 June 2010, para. 53.
23 Given the lack of further clarification, at least three diverging interpretations of "Promotion or advertising services" (CPC 96111) are possible: CPC 96111 is intended to cover activities related to (i) production and circulation of advertisements for audiovisual services; (ii) broadcast of advertisements through audiovisual media; and/or (iii) production of audiovisual advertisements, e.g. for TV commercials. See Advertising Services, Background Note by the Secretariat, WTO document S/C/W/47, box 1.
first two rules, they shall be classified under the category which occurs last in numerical order among those which equally merit consideration; services which cannot be classified in accordance with the above rules shall be classified under the category appropriate to the services to which they are most akin. These rules of interpretation are maintained in the subsequent versions of the CPC. In the latest version, the CPC Version 2.1, another rule is added to address the classification of bundled products, which states, "products making up a bundle (combination) of goods and services shall be classified according to their main component (value added), insofar as the criterion is applicable." While designed to guide statisticians, these rules may also be helpful for the scheduling of commitments. After all, trade negotiators need to use their own judgement when it is not clear under which sector a service should be placed or where to draw the delineation line between two sectors or subsectors. This is because specific commitments are undertaken based on the assumption that they reflect policy considerations.

3. Services not explicitly referred to in W/120 and "new services"

Many services are not explicitly referred to in W/120 and/or the CPC. Examples are not only about ICT-related services such as cloud computing, web hosting, social media, search engines, call centres, mobile applications, online videos or online games, just to name a few. The problem also exists in some other sectors, for instance, in business, environment and energy services. It should be noted that some "popular" services which do not seem to figure in W/120 and the CPC are simply labelled in business or industry terminology and thus may be read or mapped into the classification by examining their nature or functions. This mapping task is important not only for the scheduling of specific commitments, but also for determining the scope of commitments in dispute settlement as evidenced in WTO jurisprudence. However, it has been pointed out that some services may not have a proper entry in W/120 and/or CPC at all. To identify and classify those services that are not explicitly listed in the current classification system is necessary because Members want to be assured of the scope of the commitments they intend to undertake. Not only is this relevant for future

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27 For example, there is no mention of bunkerage in either W/120 or CPC. However, since it refers to the filling of a ship with coal or oil, this function could be covered by "Retail sale of motor oil" (CPC 61300), "Sales on a fee or contract basis of fuels ..." (CPC 62113) or "Wholesale trade services of solid, liquid and gaseous fuels and related products" (CPC 62271). Maritime Transport Services, Background Note of the Secretariat, S/CSS/W/160, 4 October 2001, p. 45.
28 For example, it has been pointed out that no relevant categories exist in W/120 or CPC for some specific energy-related services, such as wholesale and retail of electricity, town gas, steam and hot water, metering and billing. See Energy Services, Background Note by the Secretariat, S/C/S/311, 12 January 2010, para. 47; other examples such as educational testing and evaluation, student recruitment and placement services, see Education Services, Background Note by the Secretariat, S/C/S/313, 1 April 2010, para. 8.
negotiations, it may also have implications on how to define the coverage of existing commitments in schedules (see Section III). In this context, the issue of "new services" was and remains of concern to many Members.

The Understanding on Commitments in Financial Services, a document drafted during the Uruguay Round, contains a particular provision devoted to "New financial services" which refer to services of a financial nature, including services related to existing and new products or the manner in which a product is delivered, that are not supplied in the territory of a particular Member but supplied in the territory of another Member. According to this definition, a new financial service is not an innovative financial service; what essentially makes a financial service "new" or not depends actually on the availability of such service in a particular territory.

However, there is no definition of "new services" in general under the GATS. In the early years of the GATS, Members already started to consider "how a classification system can provide coverage for new services that may emerge in the future"\(^\text{29}\), and the Committee on Specific Commitments was engaged in discussions addressing a number of related questions, including how "new services" should be identified and defined, what would be their relationship with existing commitments, the relationship between new services and national regulations, who should decide whether a given service was new, and procedures for the definition of new services. In this context, three broad approaches to the problem of identifying and defining a new service were mentioned.\(^\text{30}\) The first was that only services not yet listed in the Central Product Classification could really be regarded as new, and no existing commitment could be held to cover such a service. It was suggested that a distinction should be drawn between services that are genuinely new and mere variants of existing services created by the application of new technologies; such "variants" could perhaps only be regarded as new services if they were not adequately covered by the CPC. It might follow that such a variant of an existing service could be covered by an existing commitment, depending on the nature of the variant service and on the way in which the commitment has been scheduled. A slightly different interpretation was that a service which had not previously been feasible because the necessary technology was not available could not be held to be covered by an existing commitment. The testing of CD-ROMs was quoted as an example of a service arising from the invention of new technology, which could therefore not be held to be covered by a commitment made before that technology was invented. A more far-reaching interpretation was that any service "unforeseen" at the time of commitments could not be considered as covered by it, even if the definition in the CPC covered the "unforeseen" service.

\(^{29}\) WTO document S/CSC/M/3.

\(^{30}\) Informal Note by the Chairman of the Committee on Specific Commitments, dated 1 October 1997.
The discussion on "new services" was considered to be premature in late 1990s and, unsurprisingly, reached no conclusion. Recently, given the increasingly significant impact of technological advances on trade in services, the issue of "new services" has been raised again not only in the WTO but also in numerous negotiations on preferential trade agreements (PTA). The recent discussion in the Committee on Specific Commitments, while having touched upon a number of issues related to "new services", still have yet to clarify some fundamental ones. Although it has been reiterated that a distinction should be made between a new means of delivery and a genuinely new service, no indication has been given regarding what "new" is meant to be: is "new" relative to a particular point of time, a particular market, or a particular function? There are divergent views as to whether a definition of "new services" is needed under the GATS, which suggest underlying concerns in different aspects. One concern expressed is that exploring "new services" might undermine the value of existing commitments and that the implications of "new services" for the existing commitments should be for a dispute panel to decide. The thorny question here is probably whether a Member could be assumed to undertake commitments on a service that could not be foreseen at the time of commitments. Another concern is about how those services without explicit references in W/120 and CPC could be featured in schedules as commitments. Some of them may be mapped into the existing classification by clarifying the nature of the services, such as cloud computing, voice over Internet Protocol, while others such as various mobile applications may require additional tools.

A number of countries have explicitly excluded "new services" from their commitments in PTAs when the commitments are undertaken based on the negative-list approach. Some provide a definition of "new services", while others do not. The various definitions of "new services" in PTAs or undertaking a sweeping reservation on "new services" without defining them suggest countries' concern about the uncertainty associated with "new services". In some PTAs, "new services" refer to services not recognized or technically not feasible at the time of undertaking commitments, and services positively and explicitly listed in the currently applied classification system (e.g. national nomenclature, or the 1991 CPC Provisional) are considered to be "recognized". Some other

31 See the discussion in the Committee on Specific Commitments as reflected in WTO document S/CSC/M/71.
32 Ibid.
33 Ibid.
34 For example, Japan has made reservation on new services in PTAs (e.g. Japan-Chile; Japan-Mexico; Japan-Switzerland) as follows: "Japan reserves the right to adopt or maintain any measure relating to new services other than those recognized or that should have been recognized owing to the then circumstances at the time of entry into force of this Agreement by the Government of Japan. Japan reserves the right to adopt or maintain any measure relating to the supply of services in any mode of supply in which those services were not
countries have adopted an approach similar to that in the Understanding on Commitments in Financial Services, but they are particularly concerned about telecommunications, computer-related and audiovisual services which are considered to be affected by information technologies more profoundly than other sectors. These countries thus define "new services" as services that are not currently delivered in their markets, including "services related to existing or new products or the manner in which a product or service is supplied".\(^{35}\) Besides, in many PTAs, "new services" continue to be an important issue in the financial sector.\(^{36}\) In the recently concluded Trans-Pacific Partnership Agreement, one Party has made similar carve-out in its services commitments on "Unrecognized or Technically Unfeasible Services" which are defined in the same way as "new services" in some previous PTAs.\(^{37}\) Apparently, some countries are reluctant to commit themselves to what they view as uncertainty.

4. **Undefined "Other" category in W/120**

The CPC contains many sub-categories under the heading "… services not elsewhere classified" so as to be comprehensive. W/120 carries on the same intention. As a result, each sector ends with a catch-all "Other" category. However, some "Other" categories have CPC references, while others do not. Absence of CPC references for the residual category appears to provide flexibility in applying the classification system to the scheduling of commitments, but it may also add uncertainty as it always begs the question: what is covered under that "Other". For example, under technically feasible at the time of entry into force of this Agreement. Any services classified positively and explicitly in JSIC (Japanese Standard Industrial Classification) or United Nations Provisional Central Product Classification (CPC), 1991, at the time of entry into force of this Agreement should have been recognized by the Government of Japan at that time." Mexico, in its FTA with Japan, has also made a reservation on new services and adopted a similar definition.

\(^{35}\) In Switzerland-Japan FTA, Switzerland has made market access and national treatment reservation on new services with respect to the following sectors: programme transmission services (CPC 7524); radio and television cable services (CPC 75300); telecommunication services (CPC 752); other computer services n.e.c. (CPC 8499); other advertising services (CPC 8719); other business services n.e.c. (CPC 87909); motion picture and video production and distribution services (CPC 9611); motion picture projection services (CPC 9612); radio and television services (CPC 9613); other entertainment services n.e.c. (CPC96199); and other recreational services n.e.c. (CPC 96499). It also indicates: "for the purpose of this reservation, the term 'new services' means services that are not currently delivered on the Swiss market. It includes services related to existing or new products or the manner in which a product or service is supplied."

\(^{36}\) In particular US PTAs contain a specific provision: "Each Party shall permit a financial institution of the other Party to supply any new financial service that the Party would permit its own financial institutions, in like circumstances, to supply without additional legislative action by the Party. Notwithstanding Article 13.4(b), a Party may determine the institutional and juridical form through which the new financial service may be supplied and may require authorization for the supply of the service. Where a Party requires a financial institution to obtain authorization to supply a new financial service, the Party shall decide within a reasonable time whether to issue the authorization and the authorization may be refused only for prudential reasons."

\(^{37}\) In the TPP, Japan has made reservation on market access to cross-border services trade in Unrecognized or Technically Unfeasible Services which apply to all sectors. The description of this reservation is the same as Japan's reservation on new services in above-mentioned PTAs.
the heading "Professional services", one may wonder, what would be the "other" possible professions, following the ten specifically listed sub-sectors. A similar problem exists for "Other" telecommunication services, "Other" audiovisual services, "Other" distribution services, "Other" environmental services, "Other" health related services, "Other" tourism services, etc. It should be noted that some WTO Members have indeed inscribed undefined "Other" in their schedules. Then, how should such entries be interpreted? If it is difficult to reach agreement on what is covered by those undefined "Other" categories in W/120, would it be possible to set down some criteria for the eventual interpretation of those entries in GATS schedules?

Since W/120 was created based on the Provisional CPC, it seems that the latter could be taken as a necessary reference, even for entries without CPC codes. For instance, environmental services in W/120 consist of four sub-sectors: A. Sewage services (CPC 9401); B. Refuse disposal services (CPC 9402); C. Sanitation services (CPC 9403); and D. Other. In the Provisional CPC, all environmental services are grouped in Division 94 under the heading "Sewage and refuse disposal, sanitation and other environmental protection services", which is further broken down to five-digit level. It appears to be reasonable and logical to assume that the "Other" category in environmental services of W/120 should include the remaining elements of Division 94 i.e. cleaning of exhaust gases (CPC 9404), noise abatement services (CPC 9405), nature and landscape protection services (CPC 9406) and other environmental protection services n.e.c. (CPC 9409).

However, sometimes it seems more difficult to assume what the residual "Other" category in certain sectors is intended to cover. One example would be audiovisual services in W/120 which consist of: a. Motion picture and video tape production and distribution services (CPC 9611); b. Motion picture projection services (CPC 9612); c. Radio and television services (CPC 9613); d. Radio and television transmission services (CPC 7524); e. Sound recording (no CPC correspondence applicable). f. Other. Here, there are services originally placed in different CPC groups (Group 961 - Motion picture, radio and television and other entertainment services, and Group 752 - Telecommunication services) as well as services that have no place in the CPC. Audiovisual content might be the common feature of the services under the heading "Audiovisual services" in W/120, but this may not be sufficient to determine what else is covered by "Other". Would audiovisual content delivered through internet or mobile applications be deemed to fall under "Other" audiovisual services? Likewise, how should we classify online accommodation booking services provided by

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38 An interesting case is that the association of corporate sectaries and governance professionals claims that the services they provide, i.e. corporate Governance, Compliance and Secretarial Advisory Services, are not explicitly referred to in either W/120, nor CPC, and could be covered by "Other professional services". See S/CSC/M/63.

39 Background Note on Environmental Services, WTO document S/C/W/320, 20 August 2010, p. 12.
internet companies such as Booking.com? It appears that they do not fit in with the definition of hotel services (CPC 641), but given their nature, could they be considered as "Other" tourism and travel related services?

Having a residual category in classification may be convenient for statistical purposes to deal with ambiguous cases including seemingly newly emerged services. But for the sake of trade negotiation and the scheduling of commitments, more clarity of "Other" categories would be needed in order to minimize uncertainty in the description of sectors and avoid controversy on the scope of commitments.

III. WHY CLASSIFICATION MATTERS: LESSONS FROM WTO DISPUTE SETTLEMENT

As indicated above, classification is an indispensable tool for any trade negotiations on services and for defining services commitments, in particular for the scheduling of commitments based on the GATS-type (so-called positive) list approach. WTO jurisprudence shows that failure to clearly define the scope of commitments may bring the country concerned into trouble. It should also be noted that deviations in the application of the GATS classification system have implications for specific commitments. To determine what is covered and what is not covered in a services schedule sometimes can also be challenging for panels and the Appellate Body.

WTO Members assume two types of obligations under the GATS. The first type of obligations is stipulated in the General Agreement, and the second type - "specific commitments" - laid down in country-specific schedules. The latter are mainly obligations on market access and national treatment with respect to the committed sectors. In other words, market access and national treatment under the GATS are not general obligations, but subject to each individual Member's specific commitments. These commitments are inscribed in the schedule based on an approach whereby a Member has no obligations in market access and national treatment for those services sectors not listed in the schedule. Moreover, for committed sectors, a Member's market access and national treatment obligations are usually subject to various conditions inscribed in the schedule. Constituting the core of the GATS, the scheduling mechanism allows each Member to tailor its substantive commitments according to its domestic policy considerations and regulatory concerns. As a result, the scope of substantive obligations under the GATS varies from Member to Member.

When making commitments under the GATS, governments start with the selection of sectors and the description of the selected sectors. Each Member needs to make sure that the scope of its
commitments as reflected in its schedule corresponds to its intention. The Scheduling Guidelines also highlight the importance of achieving "the greatest possible degree of clarity in the description of each sector or sub-sectors scheduled". Lack of clarity in the schedule opens the door to different interpretations of commitments and may cause disputes. In this regard, classification is a useful tool that can facilitate the scheduling of specific commitments. It also plays an important role in dispute settlement, as WTO jurisprudence shows.

To date, 24 cases involved the GATS in the requests for consultations, and seven of them went through the adjudicatory process. GATS-related legal issues were appealed in four cases. Given that the Agreement "applies to measures by Members affecting trade in services" (Article I), any claim made under the GATS needs to indicate what are the services concerned. Panels and the Appellate Body, in making rulings on services-related disputes, also begin their analysis with the identification of the services at issue as they presumably first need to determine whether the challenged measures are "measures affecting trade in services" within the meaning of GATS Article I. If the inconsistency claims are made under GATS Article XVI and/or Article XVII, panels and the Appellate Body then need to determine whether any specific commitments have been undertaken with respect to the services at issue and what the scope of the commitments is. To determine the scope of the commitments concerned, panels and the Appellate Body would have to interpret the sectoral description in the schedule, which is, in most cases, based on a certain classification. Therefore, some findings by panels and the Appellate Body may be relevant for our consideration of the services nomenclature.

1. **Label vs. nature: identification of the services at issue**

Normally, in a dispute under the GATS, the services at issue are indicated in the claims made by the complaining party as it is challenging measures affecting trade in services within the scope of the GATS. However, the identification of the services at issue may not always be as straightforward as it appears. Sometimes the services claimed by the complainant are not explicitly referred to in W/120 and the CPC, and they may also be labelled differently in the challenged measures and/or in the relevant commitments. There are also cases where the parties dispute on the nature of the services at issue. As a result, considerable analysis may be needed to identify and define the services at issues to see how they are related to the measures at stake and to the relevant commitments.

In *China - Publications and Audiovisual Products*, a number of China's measures were challenged under its Accession Protocol, the GATS and GATT 1994. With respect to the GATS, the United States claimed that China maintained certain measures inconsistent with its specific
commitments with respect to distribution services of reading materials, audiovisual products and sound recordings. Under the claims on sound recordings, the services concerned were referred to in different terms in the Panel Request, such as "electronic distribution of sound recordings", "digital distribution of sound recordings", "distribution of sound recording in digital form". The measures challenged in the case used the terms of "network music" or "online music" to refer to the targeted services. These measures were claimed to be inconsistent with China's GATS commitments under the heading "Distribution of sound recordings". The parties disagreed on what the services at issue were. The Panel noted that the panel request had specified electronic distribution as "digital distribution". It then looked into the meaning of "digital" and concluded that the distribution of sound recordings through the Internet or by other electronic means should be the services at issue for the claims with respect to the measures governing so-called "online music".

In China - Electronic Payment Services, the United States claimed that certain Chinese measures affecting the supply of electronic payment services were inconsistent with China's GATS commitments under the heading "All payment and money transmission services, including credit, charge and debit cards, travellers cheques and bankers drafts (including import and export settlement)". The parties differed on what the services at issue were. According to the United States, the services at issue were electronic payment services for payment card transactions, whose key components consisted of "the processing infrastructure, network, and rules and procedures, which facilitate, manage, and enable transaction information and payment flows, and which provide system integrity, stability and financial risk reduction". China argued that the services at issue were "transaction processing services" or "network services", "i.e. the services that network operators provide to financial institutions for the purpose of authorizing, clearing, and settling inter-bank payment card transactions". The Panel indicated that the services at issue in this dispute were determined by the description in the panel request, which were electronic payment services for payment card transactions. The Panel also noted that despite using different labels, the parties actually agreed on most elements of the services at issue and differed on only two issues, more specifically on whether the services at issue related only to "inter-bank payment card transactions" and whether the payment card company was a party to the payment card transaction. After having undertaken analysis, the Panel concluded that the services at issue were electronic payment services for all types of payment card transactions, "regardless of the labels used by the parties to refer to them".

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42 Ibid, para. 7.27
43 Ibid, para. 7.37.
The case law suggests that a service may be referred to differently in different places, by different people and for different purposes. For example, the terminology used by business may not be the same as that used by statisticians or policy makers. What is essential is the nature of the service. It has been identified by WTO Members that a number of services are not explicitly referred to in W/120. As indicated above, these services may be mapped into W120 based on their nature, but it remains challenging to clarify the criteria that determine the nature of a service. The notion of "integrated service" introduced in *China - Electronic Payment Services* is an example vividly illustrating such challenge.

In identifying the nature of electronic payment services, the Panel in *China - Electronic Payment Services* noted two issues which, in the Panel's view, were different albeit closely related. One was whether the services at issue could be considered as an integrated service, which was supplied as such; the other was whether the services at issue should be classified under a single subsector or under more than one subsector in the classification system. The Panel noted that the services at issue were composed of several elements which were services in their own right, e.g. "the process and coordination of approving or declining a transaction", "the delivery of transaction information among participating entities", "the calculation, determination, and reporting of the net financial position of relevant institutions for all transactions that have been authorized", and "the facilitation, management and/or other participation in the transfer of net payments owed among participating institutions". According to the Panel, while these elements might be individually identifiable services, all these elements, together, were necessary for the payment card transaction to materialize and were integrated into a whole. The Panel therefore concluded: "... considering the transaction from beginning to end, electronic payment services for payment card transactions constitute an integrated service". And the Panel found that the services at issue as an integrated service were covered by China's commitments under "all payment and money transmission service*s.

It is very interesting to contrast the notion of "integrated services" with the approach taken by the Panel and the Appellate Body in *EC - Bananas III* where the services at issue "wholesale trade services" were identified based on the principal services rendered by service suppliers. Although the Panel and the Appellate in *EC - Bananas III* could rely on the CPC headnote in this regard as the EC commitments on "wholesale trade services" are undertaken with relevant CPC references, their further explanation drew attention to the distinction between principal and subordinate services and its implications for scheduling:

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44 Ibid, para. 7.59.
... In many instances, in order to resell merchandise it may be necessary to maintain inventories of goods, to sort and grade goods, to break bulk, refrigerate, and deliver goods to the purchaser. Thus, the subordinate activities listed in the headnote to CPC section 6 (such as maintaining inventories, breaking bulk, etc.), when they accompany the reselling of merchandise and are not performed as a separate service in their own right, are within the scope of wholesale trade service commitments. However, a distinction is made between performing any of these subordinate activities as a component of supplying a "wholesale trade service" and performing any of them as a service in its own right. In the case of the latter, that activity is classified in a separate CPC category with a different number and would be treated under the GATS as such.45

To some extent, the notion of "integrated services" introduced in China - Electronic Payment Services may blur the distinction between service inputs and outputs. The criticism of the Panel approach in the case seems unable to clarify such distinction either.46 It should be noted that the GATS explicitly distinguishes service inputs from outputs. Such distinction is relevant for service classification as well as for the scheduling of specific commitments.

A footnote to GATS Article XVI (market access) provides that limitations on the total quantity of service output do not cover measures limiting inputs for the supply of services. The Scheduling Guidelines emphasize that market access and national treatment commitments apply only to the sectors or sub-sectors inscribed in the schedule and do not imply a right for the supplier of a

46 China did not appeal the Panel's finding in the case. However, in its statement at the DSB meeting, China criticised the Panel's approach:

"China was concerned, in particular, about the Panel's approach to the classification of the services at issue in this dispute. The processing of payment card transactions involved a number of distinct and separately identifiable service subsectors, including data processing services and clearing and settlement services. The Panel had classified these separate and distinct services into a single subsector, "payment and money transmission services", based on the idea that any service that was "necessary" or "essential" to the supply of another service should be classified as that other service. The Panel's approach to services classification should be of broader systemic concern to Members as a whole. This approach, if followed in other disputes, would undermine the taxonomy of distinct and mutually exclusive service subsectors that was the foundation for negotiating and scheduling services commitments. Many service transactions involved a number of distinct services operating in conjunction with each other. Sometimes those services were provided by the same service supplier, and sometimes they were provided by different service suppliers. If services were classified based on whether they were "necessary" or "essential" to the provision of some other service, Members would be left with an undifferentiated mass of "services". That was not how Members had agreed to negotiate and schedule their services commitments, and it was inconsistent with the Appellate Body's recognition that the service subsectors in a Member's Schedule of Specific Commitments were mutually exclusive." (para. 91, WT/DSB/M/321)
committed service to supply uncommitted services which are inputs to the committed service. For example, internet access is a necessary input to any services delivered through internet, but a full commitment on online content services does not grant service suppliers the right to provide internet access services. On the other hand, the GATS classification (W/120 +CPC) is based on service outputs. Noting that sometimes a service output may be a combination or composition of a number of services, which is the case of electronic payment services, the explanatory note of the CPC provides guidance on how to classify "composite services". According to the latter, "composite services" shall be classified based on the constituting service that gives them their essential character; if not possible, they shall be classified under the category that is the most disaggregated or to which they are most akin. Following this guidance, one may probably draw the same conclusion that electronic payment services for payment card transactions are payment services as the latter defines the essential character of the services at issue. However, by introducing the notion "integrated services", the Panel in China - Electronic Payment Services attempted to highlight the feature of integration in electronic payment services: a service output consists of a number of individually identifiable services which are integrated into a whole and thus constitute a service of "different" nature. What then would be the implications of this notion? Could one argue that when a full commitment is made with respect to a so-called integrated service, no limitation can be imposed on any constituting element of the service output since each element is necessary and essential? However, the other side of the coin is that one may also invoke the integration feature to argue that there is no commitment on the integrated service unless it is explicitly listed, for example the services provided by Google, Facebook or a lot of mobile applications, or modern logistics services or supply chain management services, because they are distinct from the component services. The notion of "integrated services" might also be used to support the arguments for the emergence of "new services", since the Panel said:

... In our view, what is relevant in relation to the classification of an integrated service is not whether it is supplied by a single supplier or by several suppliers, but rather whether the component services, when combined together, result in a new and distinct service, the integrated service. (Emphasis added)

2. Classification and the interpretation of specific commitments

The description of service sectors in schedules is usually based on a certain classification, be it W/120 or another system. Classification means not only providing definitions to individual services,
but also setting out the relationship between services. The internal logic of the classification system used in schedules sometimes tends to be overlooked when panels and the Appellate Body determine the scope of specific commitments in GATS-related disputes. This is because panels and the Appellate Body treat sectoral entries in the schedule as an issue of treaty interpretation rather than classification issues. Therefore, when determining the meaning of sectoral entries, they follow the general rules of interpretation as set out in Articles 31 and 32 of the Vienna Convention on the Law of Treaties (the "Vienna Convention"). This is consistent with the jurisprudence with respect to tariff schedules under the GATT. Panels and the Appellate Body consider services schedules, like tariff schedules, to be no different from other treaty text in the WTO. In US - Gambling, the Appellate Body noted that the task of ascertaining the meaning of a concession in a GATT schedule as well as in a GATS schedule, like the task of interpreting any other treaty text, was to follow the customary rules of interpretation of public international law. In applying general rules of interpretation to ascertain the meaning of a sectoral entry in a services schedule, panels and the Appellate Body consider all the elements of Article 31 (1) of the Vienna Convention. According to Article 31(1), "A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose". Therefore, panels and the Appellate Body first undertake a textual analysis of the ordinary meaning of relevant terms used to describe the services contained in the schedule. They then consider the ordinary meaning of these terms in their context which, under the GATS, includes, inter alia, the remainder of the schedule concerned, GATS provisions, and schedules of other Members. They also take into account the object and purpose of the GATS and the WTO Agreement. They resort to the supplementary means of interpretation pursuant to Article 32 to complete the analysis, if the interpretation pursuant to Article 31 has left the meaning ambiguous or obscure, or led to a result which is manifestly absurd or unreasonable. According to the Appellate Body in US - Gambling, W/120 only constitutes the supplemental means of interpretation identified in Article 32 of the Vienna Convention.

In discerning the ordinary meaning of the terms used in sectoral entries in schedules, panels in various proceedings started by considering dictionary definitions and parties' descriptions. The Appellate Body in US - Gambling provided certain guidance in this regard, underlining that relying solely on dictionaries was not sufficient. This position was reaffirmed by the Appellate Body in

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52 Ibid, para. 197.
China - Publications and Audiovisual Products. The Appellate Body cautioned panels against equating the "ordinary meaning" of a term with the definition provided by dictionaries and reiterated that "… interpretation pursuant to the customary rule codified in Article 31 of the Vienna Convention is ultimately a holistic exercise that should not be mechanically subdivided into rigid components". In China - Electronic Payment Services, when undertaking the textual analysis of the ordinary meaning of the terms "all payment and money transmission services" used in China's schedule, the Panel also examined industry sources in addition to dictionary definitions.

After the textual analysis, panels and the Appellate Body then undertake the contextual analysis of a sectoral entry in the schedule. The Appellate Body made it clear that the "context" should be within the meaning of Article 31(2) of the Vienna Convention, i.e. the agreement or acceptance of the parties. The specific contextual elements and their relevance to the interpretation of sector entries appear to depend on the substance of each individual case. For example, the Appellate Body in US - Gambling considered the following elements as "context": (i) the remainder of the United States' Schedule of specific commitments; (ii) the structure and substantive provisions of the GATS; (iii) the provisions of covered agreements other than the GATS; and (iv) the GATS schedules of other Members. It found that the Panel had erred in categorizing W/120 and the 1993 Scheduling Guidelines as "context" for the interpretation of the United States GATS schedule. The Appellate Body stated:

… Both W/120 and the 1993 Scheduling Guidelines were drafted by the GATT Secretariat rather than the parties to the negotiations. It may be true that, on its own, authorship by a delegated body would not preclude specific documents from falling within the scope of Article 31(2). However, we are not persuaded that in this case the Panel could find W/120 and the 1993 Scheduling Guidelines to be context. Such documents can be characterized as context only where there is sufficient evidence of their constituting an "agreement relating to the treaty" between the parties or of their "accept[ance by the parties] as an instrument related to the treaty".
We do not accept, as the Panel appears to have done, that, simply by requesting the preparation and circulation of these documents and using them in preparing their offers, the parties in the negotiations have accepted them as agreements or instruments related to the treaty. Indeed, there are indications to the contrary. As the United States pointed out before the Panel, the United States and several other parties to the negotiations clearly stated, at the time W/120 was proposed, that, although Members were encouraged to follow the broad structure of W/120, it was never meant to bind Members to the CPC definitions, nor to any other "specific nomenclature", and that "the composition of the list was not a matter for negotiations".\footnote{Appellate Body Report, \textit{United States - Measures Affecting the Cross-Border Supply of Gambling and Betting Services}, WT/DS285/AB/R, para.175-176, original footnotes omitted.}

An important lesson from dispute settlement is that a clear reference to the classification system in the schedule, such as CPC codes, would no doubt be helpful to minimize uncertainty in the determination of the scope of specific commitments. When applying those classifications without reference documents, such as the Annex on Financial Services and some sectors/subsectors in W/120, Members particularly need to consider how to ensure that what they intend to bind is clearly reflected in the schedule.

We have noted that technological developments present challenges to the application of the 24-year-old classification system. How the impact or the state of technology should be addressed has also become an issue in dispute settlement. More specifically, the issue is to what extent the state of technology that existed at the time of the negotiations is relevant to determining the scope of the commitments. This is not an issue limited to services. The Panel in \textit{EC - IT products} noted that a related issue was how technological development, product evolution and "new products" should be dealt with in interpreting concessions, and that "it is neither desirable nor possible to answer such questions in the abstract and without reference to the terms of the concessions that are being interpreted."\footnote{Panel Report, \textit{European Communities and its Member States - Tariff Treatment of Certain Information Technology Products}, WT/DS375/R, WT/DS376/R, WT/DS377/R, para. 7.596. In this case, the Panel did not totally ignore the state of technology at the time of ITA negotiations as it noted that the notion of multifunctional monitors was not unknown to negotiators. But it then indicated that there was no need to consider further the particular status of technology at the time of negotiations. In responding to the EC's argument that multifunctional monitors were "new products" that had not existed at the time of negotiations, the Panel reiterated that the notion of multifunctional monitors was not unknown to negotiators. It continued that even if the EC's claim were accepted, it was of limited relevance to the question of whether the product in question was covered by the concessions, because "this must be determined by interpreting the terms of the concession in accordance with the Vienna Convention." (para. 7.599-7.601)
In China - Publications and Audiovisual Products, China argued that its commitment on "sound recording distribution services" should not be considered to cover the electronic distribution of sound recordings because the latter had emerged as an established business and the legal framework for such business only after the negotiation of its GATS Schedule and its accession to the WTO; according to China, this was part of the circumstances of the conclusion of its GATS Schedule that had to be taken into account when interpreting its commitment.\textsuperscript{59} In responding to China, the Panel admitted that evidence on the technical feasibility or commercial reality of a service at the time of commitments might constitute circumstances relevant to the interpretation of its scope under Article 32 of the Vienna Convention. It further observed:

This is particularly true where, like China's entry on "sound recording distribution services", the commitment is not explicitly linked to a well-defined system of services classification, such as the CPC. At the same time, the significance of any evidence of lack of technical feasibility or absence of commercial reality of the service at the time of the service commitment would need to be carefully evaluated. We consider therefore that any evidence that sound recordings delivered in non-physical form were not, unlike today, technically possible or commercially practiced at the time China's Schedule was negotiated might, in principle, be relevant as a supplementary means of interpretation with respect to the scope of that commitment.\textsuperscript{60}

The Panel assessed the evidence presented by the parties on the technical feasibility and commercial practice with respect to the electronic distribution of sound recordings before and at the time of China's Protocol of Accession. It then found that the electronic distribution of sound recording was technical feasible and a commercial reality before China's accession to the WTO and confirmed its finding under Article 31 of the Vienna Convention.\textsuperscript{61} While upholding the Panel's findings with respect to "sound recording distribution services", the Appellate Body has made a nuanced reasoning as to how services schedules should be interpreted. Without referring to the state of technology, it indicated that the ordinary meaning to be attributed to the terms of specific commitments could not be limited to the meaning that they had at the time the Schedule had been concluded. In order words, the terms of specific commitments should be interpreted based on their contemporary meaning; according to the Appellate Body, such reading of the terms in China's GATS Schedule is consistent with the

\textsuperscript{60} Ibid, para. 7.1237.
\textsuperscript{61} Ibid, para. 7.1247.
approach taken in US – Shrimp, where the Appellate Body interpreted the term "exhaustible natural resources" in Article XX(g) of the GATT 1994. The Appellate Body noted:

More generally, we consider that the terms used in China's GATS Schedule ("sound recording" and "distribution") are sufficiently generic that what they apply to may change over time. In this respect, we note that GATS Schedules, like the GATS itself and all WTO agreements, constitute multilateral treaties with continuing obligations that WTO Members entered into for an indefinite period of time, regardless of whether they were original Members or acceded after 1995.

We further note that interpreting the terms of GATS specific commitments based on the notion that the ordinary meaning to be attributed to those terms can only be the meaning that they had at the time the Schedule was concluded would mean that very similar or identically worded commitments could be given different meanings, content, and coverage depending on the date of their adoption or the date of a Member's accession to the treaty. Such interpretation would undermine the predictability, security, and clarity of GATS specific commitments, which are undertaken through successive rounds of negotiations, and which must be interpreted in accordance with customary rules of interpretation of public international law.62

The Appellate Body therefore suggests that when interpreting the terms applied in services schedules, changes over time in their meaning should be taken into consideration, which would apparently include the evolution of technology. One Member commented that "the Appellate Body's observation could potentially have far-reaching consequences if applied literally in the context of new services or new technologies".63 This view alludes to some Members' concern that applying the evolutionary approach to the interpretation of GATS schedules may extend specific commitments to cover "new services", i.e. services that could not be foreseen at the time of commitments.

Case law suggests that in determining the scope of commitments, WTO adjudicators attempt to balance between the relevance of the state of technology and the need for a dynamic interpretation. In this regard, the distinction between a genuinely new service and a new means of delivery may be relevant, especially from the perspective of classification. With this in mind, applying the evolutionary approach to the interpretation of services schedules may be undertaken in a more nuanced manner. The product-based service classification is technology-neutral: a commitment on

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63 WTO document S/CSC/M/66, para. 1.33.
certain service is valid for any means of delivery including those technologically unfeasible at the
time of commitments unless otherwise specified. Since the US has undertaken a full cross-border
market access commitment on gambling and betting services, it is obliged to allow the supply of these
services by any means of delivery, including Internet, unforeseen during the Uruguay Round when the
commitment was undertaken. Likewise, a full commitment on voice telephony is to guarantee the
supply of such service through any technology, including those that may emerge in the future and
cannot be foreseen at the time of commitments. However, it may be problematic to interpret specific
commitments as covering genuinely new services, if any, as this would be inconsistent with the
positive list approach under the GATS: a Member has no market access and national treatment
commitments with respect to the services that are not explicitly listed in its schedule. This is the
essential difference as compared to the negative list approach applied in many PTAs where a ratchet
mechanism is normally included, which makes any future liberalization measures automatically
become commitments under the PTAs unless otherwise specified in the schedule. In this context, it
may not be difficult to understand why in PTAs a number of countries have made a sweeping
reservation on "new services" (see Section II) when committing themselves to the ratchet mechanism.

In China - Electronic Payment Services, when determining the scope of the sectoral entry in
China's Schedule -"all payment and money transmission services" which is based on the Annex on
Financial Services, the Panel made the following observation: "... classification of services is not an
abstract exercise; due regard should be had to market and regulatory realities. A classification
approach reflecting, and in accord with, those realities contributes to the clarity and, therefore,
security and predictability, of GATS specific commitments." The Panel further indicated that its
reading of the sectoral entry was consistent with these considerations, because it took due account of
"(i) the way payment systems are generally organized and regulated, as well as (ii) the essential
differences between the settling and clearing of payment instruments and of securities and other
negotiable instruments". The Panel seems to suggest that market and regulatory realities may have
effects on the nature of a service. If this is the case, the nature of certain services might vary from
Member to Member, depending on how the services are supplied and regulated. For example, data
processing and storage services are regulated in some countries as value-added telecommunication
services, but in other countries they are treated as computer related services and not subject to
telecommunication regulations. In the discussion at the Committee on Specific Commitments, one
view even suggested that the nature of a service depend on the business model involved in the

64 Panel Report, China - Certain Measures Affecting Electronic Payment Services, WT/DS413/R,
adopted 31 August 2012, para. 7.162.
provision.\textsuperscript{65} What then should be the criteria for determining the nature of a service? This question is relevant not only for classification and interpretation of specific commitments, probably also for the determination of "like" services under the GATS.\textsuperscript{66}

IV. CONCLUSION

The operation of the GATS requires that services be identified and classified, especially for the scheduling of specific commitments. Hence, a service classification system to serve this purpose, i.e. W/120 based on the Provisional CPC, was created in 1991 during the Uruguay Round. It is not legally binding, but it was used and continues to be used as the principal classification system guiding services trade negotiations and assisting the definition of the scope of commitments. In fact, almost all WTO Members have followed the structure of W/120 when scheduling their services commitments, and with some exceptions, most have used the CPC in defining the sectoral coverage of their commitments. This classification system therefore matters and its role has also been recognized in WTO dispute settlement. Nevertheless, its application is facing challenges arising from \textit{inter alia} services with multiple end-uses, overlaps between sectors, and so-called "new services". Apart from some imperfections at birth, the GATS classification system is becoming increasingly inadequate in capturing new market realities, at least in some important service sectors, as the last two decades have seen dramatic technological and commercial evolutions.

Since the beginning of the first round of services negotiations under the GATS, which had started in 2000 and was later incorporated into the negotiations of the Doha Round, an important number of negotiating proposals point to the inadequacy of W/120 and the Provisional CPC, covering sectors from computer, telecommunications, audiovisual, postal, distribution, logistics to education, tourism, environment, and energy services. In general, these proposals put forward approaches to addressing services classification problems in a pragmatic manner with a view to facilitating negotiations or securing commercially meaningful commitments. Proposed approaches include \textit{inter alia} clarification or understanding of existing classification, modal schedule, checklist, or cluster, which, building upon the current classification, attempt to bridge the gap between the classification of relevant sectors in W/120 and new market realities.

For example, recognizing significant developments of information and communication technologies and emergence of new business offerings, in order to increase the clarity of

\textsuperscript{65} See WTO document S/CSC/M/70, para. 2.4-2.5

\textsuperscript{66} So far the basic criteria for determining like services and like service suppliers under the GATS have yet to be clarified. See Mireille Cossy: \textit{Determining "likeness" under the GATS: Squaring the circle?} WTO Staff Working Paper ERSD-2006.08.
commitments and facilitate negotiations, a group of Members proposed an Understanding on the Scope of Coverage of CPC 84 - Computer and Related Services. It tries to clarify the scope of CPC 84, address the situation where many services in this sector consists of a combination of basic computer service functions, and distinguish computer and related services from the other services that are enabled by computer and related services.

Concerned about uncertainty that may arise from commitments undertaken based on the classification of postal and courier services in W/120, several Members proposed a common approach to the scheduling of specific commitments on this sector, i.e. a model schedule. According to this approach, the sectoral description would reflect the commercial reality of each Member's delivery market at the time of commitments, for instance to schedule commitments with respect to a list of selected sub-sectors that correspond to those areas that are open to competition; these sub-sectors could be identified on the basis of the type of items for which commitments are taken (e.g., letters, postcards, books, catalogues, hybrid mail, newspapers, parcels and packages, larger items), or on the basis of the type of service delivered (e.g., express delivery or handling of registered and insured items).

Noting that there is no separate category of logistics services in the current classification, which actually comprise a wide range of services, a group of Members suggested that a checklist be used to facilitate the scheduling of commercially meaningful commitments. The proposed checklist consists of three blocks of services - core freight logistics services, related freight logistics services, and non-core freight logistics services, and each block contains a list of relevant services. Thus, logistics services are defined as cutting across all the services that contribute to the supply chain, covering not only freight forwarding, freight transportation, cargo handling, distribution, express delivery, but also management consulting and computer related services. This approach is pragmatic, without creating a separate category of logistics services in the current classification. At the same time, it reflects the vital role of logistics services in ensuring the connectivity of supply chains.

To adopt a revision of W/120 in the WTO would be extremely challenging, both technically and politically. This may explain why Members have taken or suggested various pragmatic approaches to addressing challenges in the application of the current classification to services

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67 WTO document TN/W/60 and S/CSC/W/51.
68 WTO document TN/W/30.
negotiations.\textsuperscript{70} The proposed approaches again highlight the role of classification in ensuring the clarity, certainty and predictability of specific commitments in services.

\textsuperscript{70} There has been a view that using the negative list approach to undertake commitments would help overcome inadequacy of the current classification. As reflected in many PTAs, the negative list approach may not address countries' various policy considerations or concerns related to specific commitments.