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Commission on Trade in Goods and Services, and Commodities  
Expert Meeting on Methodologies, Classifications, Quantification and Development Impacts of  
Non-Tariff Barriers  
Geneva, 5-7 September 2005

Item 3 of the provisional agenda

**Methodologies, Classifications, Quantification and Development Impacts of  
Non-Tariff Barriers**

Note by the UNCTAD secretariat

**Executive summary**

There is a wide range of non-tariff barriers (NTBs). However, research aimed at arriving at a more complete and updated analysis of post-Uruguay Round NTBs and their impact on trade faces serious gaps. Current knowledge of such barriers, both empirical and conceptual, is rather limited and hampered by the lack of common methodologies and the inadequate quality of available data and updated information. The continual decline of tariff rates as the result of eight GATT rounds of multilateral trade negotiations has increased the relative importance of NTBs both as protection and as regulatory trade instruments. With the reduction in tariffs, non-tariff barriers are increasingly becoming front-stage market access concerns. The most comprehensive collection of publicly available information on NTBs is the database contained in the UNCTAD Trade Analysis and Information System (TRAINS), which is accessible through the World Integrated Trade Solution (WITS) software. It is now widely recognized that, in order to develop a more common database of NTBs, which could be utilized by all interested parties, a relevant classification system must be established reflecting today's empirical evidence. Another important research problem concerns the ways and means of quantifying NTBs. Establishing methods for quantification of NTBs is cumbersome, time-consuming and not very well studied. In addition, economic analysis to complement frequency counts of NTBs should, in particular, focus on the trade restrictiveness and impact of NTBs, especially on developing countries' trade. Many developing countries and LDCs appear to be the most exposed to NTBs. In 2002, 40 per cent of LDC exports were subject to NTBs. For other developing and transition economies and developed countries, the figure was only 15 per cent. Three broad measures appear to be necessary react to this trend: (1) enable developing countries to be involved in standard setting so they can participate more fully in world trade (this is on the agenda of the implementation issues under the Doha Round); (2) provide developing countries with systematic information and substantially more training and resources on a regular and predictable basis to enable them to understand and deal with these NTBs, challenge them whenever necessary and comply with those regulations and standards that are absolutely crucial for effective market access; and (3) formulate a balanced approach toward disciplining arbitrariness and discretion in the use of such barriers.

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## Introduction

1. At its ninth session, held in Geneva on 14-18 March 2005, the Commission on Trade in Goods and Services, and Commodities concluded that UNCTAD should examine the effects of non-tariff barriers and decided, in accordance with the São Paulo Consensus, to convene an expert meeting on non-tariff barriers (NTBs). The expert meeting will be held in Geneva from 5 to 7 September 2005.

2. The São Paulo Consensus, in paragraph 77, provided that efforts at extending market access liberalization for non-agricultural products under the Doha Work Programme should be intensified with the aim of reducing or, as appropriate, eliminating, *inter alia*, non-tariff barriers, in particular on products of export interest to developing countries.

3. The objectives of the expert meeting will be:

- To identify ways to improve, both in terms of country coverage and data quality, the NTB database contained in the UNCTAD Trade Analysis and Information System (TRAINS);
- To clarify methodologies for defining and classifying NTBs according to their nature and source, including clusters of NTBs that are already subject to WTO disciplines;
- To review econometric approaches to quantifying NTBs that could be applied to improve understanding of NTBs' role in world trade;
- To look at experiences of other international organizations in dealing with NTBs, including the WTO, the World Bank, IMF, OECD and others;
- To study the relevant activities and preliminary findings of the Consultative Task Force on Environmental Requirements and Market Access for Developing Countries;
- To consider and assess trends in NTBs and their impacts on trade of developing countries and suggest possible approaches to dealing with NTBs.

4. There is a wide range of NTBs. Some are directly trade-related (e.g. import quotas, import surcharges, anti-dumping measures), others have a link to trade in as far as their implementation is monitored at the border (e.g. labelling, packaging, sanitary standards), while a third group arises from general public policy (e.g. government procurement, investment restrictions, extent of intellectual property right protection). Methodologies for classifying and measuring the effects of NTBs have been discussed by Deardorff and Stern (1998),<sup>1</sup> Roberts, Josling and Orden (1999),<sup>2</sup> and Bora, Kuwahara and Laird (2002),<sup>3</sup> but considerable problems of data availability and assessment remain (Maskus, Wilson and Otsuki, 2000).<sup>4</sup>

5. However, research aimed at arriving at a more complete and updated analysis of the post-Uruguay Round NTBs and their impacts on trade faces serious deficiencies. Current knowledge of such barriers, both empirical and conceptual, is rather limited and hampered by the lack of common methodologies and the inadequate quality of available data and updated information.

6. The continual decline of tariff rates as the result of eight GATT rounds of multilateral trade negotiations (MTNs) has increased the relative importance of NTBs both as protection and as

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<sup>1</sup> A. Deardorff and R. Stern, "The Measurement of Non-Tariff Barriers", OECD Economics Department Working Papers No. 179, OECD, Washington D.C., 1998.

<sup>2</sup> D. Roberts D., T. Josling, and D. Orden, "A Framework for Analyzing Technical Trade Barriers in Agricultural Markets", Technical Bulletin No. 1876, US Department of Agriculture, Economic Research Service, Washington, D.C., 1999.

<sup>3</sup> B. Bora, A. Kuwahara and S. Laird, "Quantification of Non-Tariff Measures", Policy Issues in International Trade and Commodities Study Series No. 18, UNCTAD, New York and Geneva, 2002.

<sup>4</sup> R. Maskus K., J. Wilson, T. Otsuki, "Quantifying the Impact of Technical Barriers to Trade: A Framework for Analysis", Policy Research Working Paper No. 2512, World Bank Development Research Group Trade, 2000.

regulatory trade instruments. With the reduction in tariffs, non-tariff barriers are increasingly becoming front-stage market access concerns. Robert Baldwin (1984),<sup>5</sup> for instance, writes: “Not only have these measures become more visible as tariffs have declined significantly through successive multilateral trade negotiations but they have been used more extensively by governments to attain the protectionist goals formerly achieved with tariffs”. Overall, NTBs have almost replaced tariff barriers in manufacturing sectors.<sup>6</sup> One major objective in this context is to reach a common understanding on the relative importance of different types of NTBs and their impacts on developing countries’ trade.

## I. Scope, definition and classification of NTBs

### 1. UNCTAD Trade Analysis and Information System (TRAINS)

7. The most comprehensive collection of publicly available information on NTBs is the database contained in the UNCTAD Trade Analysis and Information System (TRAINS), which is accessible through the World Integrated Trade Solution (WITS) software. The NTB data incorporated in TRAINS indicate the existence of categories of NTBs classified according to the UNCTAD Coding System of Trade Control Measures (TCMCS) for particular products or groups of products. Additional information such as a brief description of each NTB, an indication of affected or excluded countries, and footnotes on exact product coverage are also provided, where available. There is not, however, any measurement of the restrictiveness of the measure.

8. TCMCS identifies over 100 different types of NTBs at its most detailed level (see annex D). This classification does not include any measures applied to production or to exports. NTBs are broadly classified into six chapters, from 3 to 8 (chapters 1 and 2 are reserved for tariff and para-tariff measures respectively), according to the intent or immediate impact of the measures:

- (i) **Chapter 3. Price control measures:** Measures intended to control the prices of imported articles for the following reasons: (i) to sustain domestic prices of certain products when the import price is inferior to the sustained price; (ii) to establish the domestic price of certain products because of price fluctuations in the domestic market or price instability in the foreign market; and (iii) to counteract the damage caused by the application of unfair practices in foreign trade. Most of these measures affect the cost of imports to a variable degree calculated on the basis of the existing difference between two prices for the same product, compared for control purposes. The measures initially adopted can be administrative fixing of prices and voluntary restriction of the minimum price level of exports or investigation of prices to subsequently arrive at one of the following adjustment mechanisms: suspension of import licences, application of variable charges, antidumping measures or countervailing duties.
- (ii) **Chapter 4. Finance measures:** Measures that regulate access to and the cost of foreign exchange for imports and define the terms of payment. They may increase the import cost in a fashion similar to tariff measures.
- (iii) **Chapter 5. Automatic licensing measures:** Freely granted approval of applications for imports or monitoring of import trends for specified products, sometimes through inscription in a register. They may be applied to signal concern over import surges and to persuade trading partners to reduce export growth. They may also be applied for environmental purposes. Sometimes they are a precursor to import restraints.

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<sup>5</sup> Robert Baldwin, *Recent Issues and Initiatives in U.S. Trade Policy*, Cambridge, MA, 1984.

<sup>6</sup> International Trade Forum Issue 2 / 2003, International Trade Centre UNCTAD/WTO (ITC).

- (iv) **Chapter 6: Quantity control measures:** Measures intended to restrain the quantity of imports of any particular good, from all sources or from specified sources of supply, through restrictive licensing, fixing of predetermined quotas or prohibitions.
- (v) **Chapter 7: Monopolistic measures:** Measures that create a monopolistic situation by giving exclusive rights to one economic operator or a limited group of operators for social, fiscal or economic reasons.
- (vi) **Chapter 8: Technical measures:** Measures referring to product characteristics such as quality, safety or dimensions, including the applicable administrative provisions, terminology, symbols, testing and test methods, packaging, marking and labelling requirements as they apply to a product.

## 2. Some current trends in NTB utilization

9. The most recent trend indicates increasing use of technical measures (classified under chapter 8 above), as well as quantitative measures associated with technical measures, and decreasing use of all other measures. To illustrate this trend, the tariff lines affected by each type of NTB, as defined by each chapter of the TCMCS, were counted and the percentage distribution calculated for all countries for which data were available at the end of 1994 and 2004. The Uruguay Round, concluded in 1994, made most quantitative restrictions (QRs) illegal, especially for agricultural products. With regard to chapter 6: Quantity Control Measures (QCMs), subcategories defined by TCMCS codes 617, 627 and 637 were singled out from the rest of the items, as they represent those QRs that are closely associated with technical measures and are applied, at least in principle, to protect the well-being of consumers and not of local producers. For example, an import license that can only be issued when certain technical requirements are satisfied is classified under subcategory 617: Prior authorization for sensitive product categories. On the other hand, if a certificate issued by the exporting country is sufficient, this measure is classified under a corresponding item in Chapter 8: Technical Measures. The results are shown in table 1.

**Table 1: Evolution of NTB use by broad category**

TCM code	TCM description	1994(%)	2004(%)
1	TARIFF MEASURES (TRQ, etc)	5.8	0.3
3	PRICE CONTROL MEASURES	7.1	1.8
4	FINANCE MEASURES	2.0	1.5
417	Refundable deposit for sensitive products categories		0.6
5	AUTOMATIC LICENSING MEASURES	2.8	1.7
6	QUANTITY CONTROL MEASURES	49.2	34.8
617	Prior authorization for sensitive product categories	18.1	17.1
627	Quotas for sensitive product categories	0.2	0.2
637	Prohibition for sensitive product categories	2.5	6.8
7	MONOPOLISTIC MEASURES	1.3	1.5
8	TECHNICAL MEASURES	31.9	58.5
<b>Non-core measures</b>	5+617+627+637+8	55.3	84.8
<b>Core measures</b>	1+3+4+6+7-(617+627+637)	44.7	15.2
<b>Number of countries</b>		52	97
<b>Total Number of observations</b>	(Number of Tariff Lines)	97706	545078

Source: Special tabulation based on UNCTAD Trade Analysis and Information System (TRAINS)

10. The results show that the use of technical measures almost doubled, from 31.9 per cent to 58.5 per cent, over the ten-year period. Use of quantity control measures associated with technical measures (subcategories 617, 627 and 637) also showed a small increase, from 20.8 per cent to 24.1 per cent. If to these are added measures classified under subcategory 417: Refundable Deposit and under Chapter 5: Automatic Licensing, to constitute what is defined as non-core measures, their use increased from 55.3 per cent of all measures in 1994 to 84.8 per cent in 2004. On the other hand, the use of core measures, which are basically quantity control measures, finance measures and price control measures, decreased dramatically, from 44.7 per cent in 1994 to 15.2 per cent in 2004, reflecting the commitments that the WTO member countries made during the Uruguay Round.

11. Tables 2a and 2b provide a breakdown of the data presented in table 1 for 1994 and 2004 respectively, by geographical region.

**Table 2a: Types of NTBs applied by region (1994)**

TCM code	TCM description	World (%)	Developed (%)	Developing (%)			C.E. Europe (%)	
				Africa	America	Asia		
1	TARIFF MEASURES	5.8	16.3	0.3	0.0	0.0	0.7	0.0
3	PRICE CONTROL MEASURES	7.1	9.4	6.1	15.3	2.7	6.9	0.0
4	FINANCE MEASURES	2.0	0.1	3.1	0.0	0.0	7.7	0.0
417	Refundable deposit for sensitive products categories	0.0	0.1	0.0	0.0	0.0	0.0	0.0
5	AUTOMATIC LICENSING MEASURES	2.8	5.3	1.5	0.0	0.0	3.7	0.0
6	QUANTITY CONTROL MEASURES	49.2	45.8	53.1	62.5	48.1	55.6	9.9
617	Prior authorization for sensitive product categories	18.1	4.7	25.9	11.2	40.9	14.2	7.1
627	Quotas for sensitive product categories	0.2	0.5	0.0	0.0	0.0	0.0	0.0
637	Prohibition for sensitive product categories	2.5	1.5	3.1	0.6	2.7	4.4	0.0
7	MONOPOLISTIC MEASURES	1.3	1.1	1.4	2.5	0.6	1.9	0.0
8	TECHNICAL MEASURES	31.9	21.9	34.4	19.7	48.6	23.5	90.1
1+3+4+6+7-(417+617+627+637)	<b>Core measures</b>	44.6	65.9	35.0	68.5	7.8	54.1	2.9
5+617+417+627+637+8	<b>Non-core measures</b>	55.4	34.1	65.0	31.5	92.2	45.9	97.1

Source: Special tabulation based on UNCTAD Trade Analysis and Information System (TRAINS).

**Table 2b: Types of NTBs applied by region (2004)**

TCM code	TCM description	World (%)	Developed (%)	Developing (%)			C.E. Europe (%)	
				Africa	America	Asia		
1	TARIFF MEASURES (TRQ etc.)	0.3	3.4	0.0	0.0	0.0	0.1	0.1
3	PRICE CONTROL MEASURES	1.8	2.9	1.7	0.5	1.9	2.2	0.0
4	FINANCE MEASURES	1.5	0.3	1.6	3.8	2.0	0.0	0.0
417	Refundable deposit for sensitive products categories	0.6	0.3	0.6	3.8	0.0	0.0	0.0
5	AUTOMATIC LICENSING MEASURES	1.7	7.4	1.1	0.7	0.2	3.0	0.3
6	QUANTITY CONTROL MEASURES	34.8	34.7	35.2	32.0	31.3	43.6	16.5
617	Prior authorization for sensitive product categories	17.1	16.7	17.2	10.5	21.3	14.0	13.5
627	Quotas for sensitive product categories	0.2	0.6	0.2	0.4	0.0	0.5	0.0
637	Prohibition for sensitive product categories	6.8	1.0	7.5	9.2	6.3	8.3	0.0
7	MONOPOLISTIC MEASURES	1.5	0.7	1.6	2.6	0.6	2.6	0.0
8	TECHNICAL MEASURES	58.5	50.0	58.6	60.4	63.9	48.4	83.1
1+3+4+6+7-(417+617+627+637)	<b>Core measures</b>	15.2	23.5	14.7	15.0	8.1	25.8	3.1
5+617+417+627+637+8	<b>Non-core measures</b>	84.8	76.0	85.3	85.0	91.8	74.2	96.9

Source: Special tabulation based on UNCTAD Trade Analysis and Information System (TRAINS).

12. Comparing the trend across different regions, while all regions more or less followed the same path of switching from core to non-core measures, the change was most dramatic in Africa. Africa was the region that relied most on core quantity control measures in 1994, with over 50 per cent of all measures applied being classified under chapter 6 (excluding 617, 627 and 637). By 2004, however, the corresponding figure had come down to 11.9 per cent. If other non-core measures such as technical measures and automatic licenses are excluded, the use of core NTBs fell from 68.5 per cent in 1994 to a mere 15.0 per cent in 2004. While determining exactly what policy change has taken place in each country in Africa requires further more elaborate analysis, Africa now has a pattern similar to that of countries in other regions in its choice of trade policy tools.

13. The rise in the relative importance of non-core NTBs as an instrument of trade policy has increased the need to update the UNCTAD Coding System of Trade Control Measures (TCMCS) in order to streamline the items within the core categories of NTBs, expand the categories of technical measures and other non-core categories and, if necessary, add new measures.

14. In the Doha negotiations, another approach is used: notifications of NTBs are submitted by interested members according to an agreed inventory to be used in the Doha round. This inventory is distinct from UNCTAD's TCMCS (see annex III), and approaches and modalities on how to deal with

NTBs are identified on the basis of the following five categories: 1) dispute settlement; 2) request/offer, bilateral, or plurilateral; 3) vertical or sectorial approaches; 4) horizontal or multilateral approaches, and 5) tariffication of NTBs.<sup>7</sup> As of the end of April 2005, using the above approach, about 40 WTO members out of 148 had submitted notifications or proposals on NTBs either individually or on a group basis.

15. It is therefore important that, in order to develop a more common database of NTBs that could be utilized by all interested parties, a relevant classification system be established reflecting today's empirical evidence. While it remains the most comprehensive database on NTBs, the UNCTAD TRAINS requires substantial improvement in terms of country coverage, updating and extra data coverage. Annex II provides a list of countries covered in TRAINS with at least one year of NTB data, with an indication of the latest available year for which data are available.

16. In order to update and expand the TRAINS database and to increase its country coverage on NTBs to match that of the tariff database (i.e. 155 countries as of 1 January 2005), it is necessary to reinforce UNCTAD resources and improve its inter-agency agreements with other international organizations that have already been collecting similar information or those interested in doing so. Internally, UNCTAD envisages increasing resources allocated to NTB-related work, including through mobilization of extrabudgetary funds. In addition, efforts are under way to strengthen collaboration and partnerships with such organizations as the World Bank, WTO, ITC and OECD.

## **II. Quantification of NTBs: Some economic aspects**

17. Quantification of NTBs is needed in order to address issues related to their use and impact.<sup>8</sup> Two broad groups of measurement methods can be identified: one can be defined as NTB-specific and one adopts a more indirect consideration of NTBs.

18. NTB-specific methods use direct information on NTBs to define their possible impact. For instance, quotas should provide reliable information for starting to investigate the possible impact on affected imports. However, obtaining the complete information set, even at the industry or sector level, is likely to be difficult and would require intensive and extensive data collection work. Missing information can thus introduce a downward bias on estimates of the trade impact of NTBs. Even if exhaustive information were available, the construction of a general measure of NTBs could be tedious, as general equilibrium effects are likely to be excluded. Direct information, then, is the appropriate approach only when trying to assess NTBs' impact at a quite disaggregated level, which should normally be avoided when dealing with a more general analysis. A general assessment of NTBs' impact will warrant frequency and coverage-type measures, price-comparison measures, and quantity-impact measures.

19. Detailed information collected for a country at a disaggregated level, as in the TRAINS database, allows straightforward measures of the frequency of occurrence of NTBs and their coverage. Frequency of occurrence, for instance, could be represented by the share of total tariff lines containing an NTB. Coverage would then be measured by the share of imports affected by an NTB as a percentage of total imports. A frequency measure can also be expressed in weighted terms based on either imports or production. These simple measures represent valuable information that could, if updated on a regular basis, help keep track of the evolution of the relative incidence of different types of NTBs and the incidence of NTBs relative to tariffs. However, they require good coverage of existing NTBs to be fully reliable, including beyond-the-border measures like internal governmental measures and imperfectly competitive behaviour. Finally, these measures do not give any direct information concerning possible impact on price and quantities produced, consumed or exchanged.

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<sup>7</sup> Negotiating Group on Market Access, "Overview of Proposals Submitted, Non-Tariff Measures", WTO doc. TN/MA/9/Rev.1, 29 October 2004.

<sup>8</sup> A comprehensive review and discussion of the issue can be found in Deardorff A. V. and R. M. Stern 1997, "Measurement of Non-Tariff Barriers", OECD Economics Department Working Paper No.179.

They can only be used to construct indicators of trade restrictiveness that in turn can be used to estimate quantity and/or price effects.

20. Price comparison measures can provide direct measures of price impacts of NTBs. Thus, they should allow easy retrieval of so-called ad valorem equivalents (AVEs), also called implicit tariffs or implicit rates of protection. However, serious conceptual and data problems are likely to arise in the estimation and interpretation of tariff equivalents. From a conceptual point of view, it is necessary to identify the appropriate prices in the data. Ideally, it would be desirable to know the prices that would prevail both with and without the NTB. However, this kind of information is impossible to obtain. Prices that are usually observed are those paid by domestic consumers and to foreign suppliers in the presence of an NTB. Thus, additional hypotheses have to be introduced to infer an AVE from the estimated price gap. In particular, goods produced domestically and imported goods need to be seen as perfect substitutes. Assuming that conceptual issues are solved, there remains the major issue of data availability. While it is fairly easy to obtain information on the price paid by the importers of a good, it might become difficult to obtain the corresponding price prevailing in the domestic market, especially at a fairly disaggregated level. This becomes even more difficult if data have to be collected for a large set of countries.

21. Quantity-impact measures can a priori provide precise information about the impact of an NTB on trade. However, as in the case of price comparison measures, it might be very difficult to obtain appropriate data to compute the exact quantitative impact of an NTB. In order to do so, it would be necessary to identify the traded quantity prevailing before the introduction of the NTB. This could be done using time series analysis, adopting a range of perhaps restrictive hypotheses concerning producers' and consumers' behaviour. In addition, the measure would remain NTB-specific, and assessing the full range of impacts of NTBs might be quite cumbersome, technically speaking.

22. However, a general approach to the measurement of the quantity effects of NTBs does exist and appears to be the most suitable for systematic and repeated estimation of NTB quantity impacts. According to the methodology used, quantity impact measures would make it possible to isolate the impact of every single NTB included in the estimation. Moreover, quantity measures associated with information on import demand elasticities could give price effect estimates and thus allow for the computation of AVEs.

23. This general quantity measurement approach can be based on either a cross-commodity or a cross-country regression model of trade. The framework is used to estimate the changes in trade due to the introduction of an NTB. Besides an extensive information set, this approach requires the adoption of a model that includes in a satisfactory manner determinants of trade in an unregulated context. The econometric model is essentially the one used in the gravity literature<sup>9</sup> that encompasses the determinants of the size of a country's external sector and the goods flow between trade partners. All approaches based on this model attempt to measure NTBs' quantity impact either by associating it with residuals obtained in the estimated regressions or by including dummy variables for each sort of NTBs informed. The quality of the results depends to a great extent on the accuracy of the underlying model.

24. However, this approach remains the most feasible if NTBs' impacts have to be estimated systematically and for a large number of products/industries and countries. To obtain AVE measures, NTB quantity measures have to be associated with estimates of import demand elasticities. The methodology used to estimate the latter also presents several drawbacks, one major one being that it can only estimate actual demand elasticity which integrates the possible presence of an NTB.<sup>10</sup> The

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<sup>9</sup> For an extensive discussion and assessment of the framework, see Anderson J. E. and E. Wincoop, "Gravity in Gravitas: A solution to the Border Puzzle", *American Economic Review*, 93, 2003. pp. 170-92.

<sup>10</sup> The introduction of an NTB that does not take a price ad valorem form makes the import demand curve shift in a non-parallel way.

price effect that could be obtained would not represent the difference with a free trade situation. This calls for caution in the interpretation of estimates. However, as in the case of quantity measures, these drawbacks have to be considered in relation to the information gain that could be achieved.

25. In a recent work, Kee, Nicita and Olarreaga<sup>11</sup> from the research development group of the World Bank were able to estimate demand elasticities for 4,625 imported goods in 117 countries. In a companion work,<sup>12</sup> the authors compute the AVEs of NTBs for 104 developing and developed countries in which AVEs were estimated at the 6digit level of the HS (potentially around 5,000 products) using their quantity-impact measures and these import demand elasticity estimates. Their estimates are based on core NTBs (price and quantity control measures) and non-core NTBs (according to UNCTAD's classification), namely technical regulations and monopolistic measures, as well as agricultural domestic support.

26. As mentioned previously, the TRAINS database does not contain AVEs of NTBs. And until the work of Kee, Nicita and Olarreaga, ad valorem equivalent estimates had never been computed in such a systematic and extensive way. However, Kee, Nicita and Olarreaga do not include all NTBs. This is to a large extent due to lack of data. Once data coverage has been improved, their approach could be used to produce new estimates with a broader and ideally exhaustive coverage of NTBs. The methodology is quite demanding in terms of quantitative work and would require an important investment in human resources.

27. Some analytical efforts should also be devoted to possible refinement of the existing methodology, such as improvements in the quantification of quantity measures. Recent theoretical and empirical work by Helpman, Melitz and Rubinstein took explicitly into account the determinants of the existence of an external sector.<sup>13</sup> Although these determinants have so far been considered at the country level, they can theoretically be considered at a much more disaggregated level. This exercise would definitely represent a strong refinement of the estimation methodology without affecting the systematic nature of the overall quantification approach.

28. Perhaps the most challenging issue that has not been considered quantitatively so far is surmounting the difficulty of disentangling the uses of NTBs that are discriminatory from those that are defensible (on legal grounds). This is of particular relevance in the case of technical barriers to trade. Although it might be desirable to investigate the possibility of identifying these two different types of uses empirically, it is difficult to think of a methodology that would allow such a distinction to be made in a systematic way. The information needed is quite specific and, as underlined in Deardorff and Stern,<sup>14</sup> could essentially be provided by technical experts only for some particular products or processes in a limited range of countries. If this information is made available, however, it may become feasible to construct estimates of costs due to discriminatory practices such as the application of higher standards to imported goods as compared to domestic goods, more stringent regulation enforcement on imports, and the application of costly certification procedures for imports.

29. Generally speaking, comprehensive estimates of NTBs' impacts, in particular price impacts, could then be used to construct sound trade restrictiveness indicators, as done by Kee, Nicita and Olarreaga. They could also be used to recalibrate existing applied general equilibrium models, which usually do not include NTBs, at least not extensively. This exercise would make it possible to

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<sup>11</sup> Kee H.L., A. Nicita and M. Olarreaga, "Import Demand Elasticities and Trade Distortions", unpublished manuscript, World Bank, 2004.

<sup>12</sup> Kee H.L., A. Nicita and M. Olarreaga, "Ad-Valorem Equivalents of Non-Tariff Barriers", unpublished manuscript, World Bank, 2004.

<sup>13</sup> Helpman E., M. Melitz and Y. Rubinstein, "Trading Partners and Trading Volumes", unpublished manuscript, Harvard University and Tel Aviv University, 2005.

<sup>14</sup> Deardorff A. V. and R. M. Stern 1997, "Measurement of Non-Tariff Barriers", OECD Economics Department Working Paper No.179.

simulate the impact of various NTB evolution scenarios, as has been done for tariffs, and thus improve the tools available to policymakers.

### **III. NTBs and concerns of developing countries**

#### **1. The rise of technical measures**

30. Since the early-1990s, many Governments have increased their use of regulations that govern trade in high-technology products. In the European Union, the focus of regulation is primarily on environment, health and safety (EHS). Recently, however, there have been tendencies by Governments to regulate IT and telecommunications products in terms of other features, such as privacy and security. In the global world of the borderless Internet, this type of government regulatory expansion could fragment international markets. Examples of NTBs also include regulations referring to technical requirements, either directly or by referring to or incorporating the content of a (mandatory or voluntary) standard, technical specification or code of practice, in order to:

- Protect human life or health or animal life or health (sanitary regulation);
- Protect plant health (phytosanitary regulation);
- Protect the environment and wildlife;
- Ensure human safety;
- Ensure national security;
- Prevent deceptive and unfair practices.

31. Such regulations raise concerns in developing countries as instruments that might affect their exports, particularly those with higher value added and those in new and dynamic sectors of international trade. Control measures such as those in the area of SPS, meant to protect humans, animals and plants, often exceed multilaterally accepted norms. Thus, there have been instances of some developing countries' consignments of prawns and frozen seafood being rejected by certain developed countries, which insisted on a zero bacteria count instead of a minimum acceptable level, as per international standards.<sup>15</sup> It is noteworthy that prawns and seafood products exported by the same companies have encountered no such problems in some other developed country markets. Technical barriers to trade (TBT) have also arisen when standards, regulations and assessment systems intended to ensure safety are not applied uniformly. Experience has shown that duplication of testing procedures that do not add value to a product adds to the cost of compliance.

32. Several regulations in developed countries apply stringent rules on food quality, packaging and labelling. Exports of poultry products, for example, have been particularly affected by such sanitary regulations, which encompass rules pertaining to equipment and methods used in the processing and packaging of the product. Obtaining approvals is a lengthy process that involves substantial documentation and tedious bureaucratic procedures. It has taken some developing countries' exporters of meat products two years to get approval. However, NTBs are encountered not only in developed country markets but also in developing countries. Addressing them, including in the context of GSTP, can therefore help increase South-South trade.

33. Technical standards and sanitary and phytosanitary standards aimed at ensuring food safety are also a substantial obstacle to expanding, for example, exports of fish and fish products. Phytosanitary controls imposed by importers are also critical for developing countries exporting fresh fruit and vegetables.

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<sup>15</sup> "FAO support to the WTO negotiations", Bulletin No. 8, FAO, Rome, 2003.

34. In the last 10 years, there has been a sevenfold increase in government-mandated testing and certification requirements.<sup>16</sup> Although it is difficult to give a precise estimate of the impact on international trade of the need to comply with different foreign technical regulations and standards, it certainly involves significant costs for producers and exporters. The high costs involved may discourage manufacturers from trying to sell abroad. In the absence of necessary and sufficient disciplines, a risk exists that technical regulations and standards could be abused and adopted and applied solely to protect domestic industries. The current trend is quite evident: companies worldwide are facing a growing number of non-tariff barriers to exports. According to an ITC study,<sup>17</sup> many developing countries and LDCs appear to be the most exposed to NTBs. In 2002, 40 per cent of LDC exports were subject to NTBs. The most illustrative examples of NTBs include plant and animal health standards, food safety standards, environmental certification and other similar export quality standards. In contrast, for other developing and transition economies and developed countries, the figure was only 15 per cent.

## 2. NTB surveys with the business communities

35. Business surveys or structured interviews represent another approach that has been used to obtain information on the importance of NTBs.<sup>18</sup> Survey investigations have the advantage of using tailor-made questionnaires to collect data for a specific analytical purpose. In addition to information concerning the frequency of NTBs, they also make it possible to gather data on the relative importance of different measures, such as their trade restrictiveness or trade impact. However, surveys tend to be very resource-intensive, and this often forces researchers to compromise on the scale of the investigation.

36. The European Commission's Market Access Database<sup>19</sup> provides information on exports from the European Union (EU) to non-EU countries. One part of this database consists of a listing of trade barriers that have been brought to the attention of the Commission by businesses. The aim of this inventory is to improve transparency in trade relations and inform exporting companies about impediments that other exporters have encountered when trying to enter particular markets. The material might also serve as background information for trade negotiations.

37. Furthermore, findings from a set of 23 survey-based OECD studies or reports, based mostly on the UNCTAD TRAINS methodology for NTBs, revealed over 1,700 business complaints about non-tariff measures in goods sectors. Machinery, food products and chemicals are the sectors in which NTB complaints are most prevalent. These three product groups account for 43 per cent of all inventory entries. The absolute number of complaints is, of course, an imperfect measure of the importance of NTBs across sectors, as the latter vary in economic size. If the number of complaints is related to sectoral export value, the agriculture and food sectors turn out to be the ones with the largest number of NTB complaints in relative terms, followed by mining and textiles. In general, OECD survey findings show that businesses worldwide feel constrained in their ability to access foreign markets by a broad set of NTBs and other kinds of obstacles.<sup>20</sup>

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<sup>16</sup> American Electronics Association, "AeA Issue Paper on Non-Tariff Barriers (NTBs)", January 2003.

<sup>17</sup> *International Trade Forum*, Issue 2/2003, ITC, pp. 25-27.

<sup>18</sup> OECD, P. Walkenhorst and B. Fliess, *Non-Tariff Measures Affecting EU Exports: Evidence from a Complaints-Inventory*, Economics Department Working Papers No. 373, OECD, Paris, 2003.

<sup>19</sup> The EU Commission's Market Access Database can be accessed via the Internet at <http://mkacddb.eu.int>. To some extent similar compilations of business complaints are also provided, for example, by the US Office of the Trade Representative ("National Trade Estimates Report of Foreign Trade Barriers"), the US International Trade Commission Non-Tariff Data Base, Japan's Ministry of Economy, Industry and Trade ("Report on the WTO Consistency of Trading Policies by Major Trading Partners"), and Chile's Ministry of the Economy ("Segundo Catastro Nacional Sobre Barreras Externas al Comercio y la Inversión").

<sup>20</sup> OECD, "Overview of Non-Tariff Barriers: Findings from Existing Business Surveys", TD/TC/WP(2002)38/FINAL, Paris, 2003.

38. The six most frequently reported NTBs (listed in table 3 below) surveyed in developing countries, i.e. Latin American countries (Argentina, Bolivia, Brazil, Chile, Colombia, Paraguay, Uruguay), the Asia-Pacific region, including China and the Republic of Korea, and the Common Market of Eastern and Southern Africa (COMESA), were the following: (1) technical measures (TBT and SPS); (2) customs rules and procedures; (3) competition-related restrictions on market access (“entry barriers”); (4) import licensing; (5) subsidies; and (6) trade defence instruments (AD, CVD and safeguards).

**Table 3: NTB categories most frequently reported by the OECD surveys**

NTB categories	No. of surveys (out of 12):	
	which cover the category	which show the category among the 5 most reported
Technical measures	10	10
Internal taxes or charges	8	6
Customs rules and procedures	7	7
Competition-related restrictions on market access	7	5
Quantitative import restrictions	7	3
Procedures and administration (general)	7	3
Public procurement practices	7	2
Subsidies and related government supports	7	2
Investment restrictions or requirements	6	3
Transport regulations or costs	6	3
Restrictions of services (general)	5	3
Restrictions on mobility of business people or labour	4	1
Trade defence instruments (ADs, CVDs, safeguards)	4	1
Local marketing regulations	2	1

Source: OECD.

### 3. What’s next for developing countries?

39. The marked increase in government regulatory action involving NTBs in developed countries is clearly, in many instances, placing costly and unnecessary burdens on companies in developing countries. Moreover, these regulations pose special difficulties for small and medium-sized businesses in entering the international marketplace. In developing countries, particularly LDCs, SMEs’ resources are often insufficient to meet multiple, duplicative requirements from country to country. NTBs may also reduce access to the latest technology by consumers in smaller economies burdened by redundant requirements because companies seek out the largest markets with the fewest regulatory barriers to entry.

40. A supportive legal and regulatory environment is vital for sustained growth in developing countries. While this goes beyond trade-related policy, elements of the associated ‘behind-the-border’ trade agenda that affect the investment climate include policies and institutions that support the participation of national firms in international markets and measures to enhance their competitiveness by ensuring access to crucial services inputs – both public and private. Key areas for many developing countries are product standards and the domestic services sector. Modernization of standards systems, including institutions and infrastructure for certification and conformity assessment, is essential to operate in the current global trade environment. Meeting international standards for quality, health and safety is increasingly a precondition for competing in international markets and has become a major factor constraining the ability of many exporters in LDCs from benefiting fully from preferential access initiatives.

41. Furthermore, Governments in developed countries, partly pushed by consumer protection organizations, are increasingly establishing regulations whose rationale does not appear justified by available technical or scientific evidence and whose cost does not appear to be proportional to the realization of intended consumer, safety, health or environmental benefits. Often, these regulations are developed with procedures that are not transparent to various stakeholders. Moreover, stakeholders find they have little leverage in participating in policy-setting process, even though their products may be directly affected.

42. The need to discipline such technical measures is an extremely difficult task and would require a complex approach and a rather extended period of time. In particular, one approach would certainly call for refining the rules and disciplines in the TBT and SPS Agreements to make them more precise (for example, to clarify the key concept of "unnecessary obstacles to international trade" in the TBT Agreement). The other approach would push towards negotiation and adoption of mutual recognition agreements (MRAs) between developed and developing countries, as is presently done among developed countries themselves.<sup>21</sup>

#### IV. Conclusions

43. Finding ways of obtaining consistent and complete information on NTBs, as well as clarifying their definition and classification, will be major challenges in the coming years. UNCTAD will intensify its work in the area, and will strengthen its cooperation with other agencies at national, regional and international levels.

44. Quantification of NTBs is a necessary step to deal with issues related to their use and impact in an appropriate and sound manner. Various quantification methods have been used so far. None of them has appeared to be perfect. However, if the main objective is to obtain a systematic and extensive estimation of quantity and price impacts of NTBs, then a general approach of quantity measures, based on the extensively used gravity framework, would represent the best option. This approach does not require as much data as other methods, such as the price comparison method. In addition, the underlying methodology can still be improved through recent advances in trade theory to refine and check the robustness of existing estimates. Associated with import demand elasticity estimates, quantity measures can be translated into price effects quite safely. With this information in hand, it would be possible to use it to construct sound trade restrictiveness indices and/or integrate it into simulation models to deepen the understanding and qualification of the impact of possible policy decisions, especially on developing countries' trade.

45. An important challenge is to ensure that multilateral trade rules do not constrain the ability of countries to achieve their regulatory objectives, i.e. to separate what is legitimate regulation from protectionist abuse (needless discrimination).<sup>22</sup> WTO negotiations on 'behind-the-border' policies, including NTBs, have proven to be more complex than traditional market access talks because it is much more difficult to trade 'concessions'. The focus therefore tends to be on identification of specific rules that should be adopted by the WTO and/or regional FTAs. And there, the quality and balance of rules is absolutely crucial. For developing countries, it is vital that outcomes on NTBs from the Doha Round (including from NAMA and other negotiating bodies) are both ambitious and commercially viable for their exports, as was envisaged both by the Doha Ministerial Declaration and the "July 2004 Framework Agreement".

46. As an emerging trend, a new, more stringent trade environment for high-technology products on the one hand and labour-intensive, low-value-added exports on the other, such as toys, consumer electronics, food and agriculture, with increasing focus on NTBs, has emerged 10 years after the

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<sup>21</sup> For example, the EU-US MRA (which entered into force in 1998) covers telecom equipment, electrical safety, medicinal products and some other products.

<sup>22</sup> Bernard Hoekman, "Developing Countries and the Political Economy of the Trading System", Discussion Paper No. 2002/126, United Nations University, WIDER, December 2002, Helsinki, p. 14.

Uruguay Round of Multilateral Trade Negotiations and implementation of WTO agreements, including the Agreements on Technical Barriers to Trade (TBT) and on Sanitary and Phytosanitary (SPS) Measures. This trend affects the entire range of developing country exports. Three policy measures appear to be indispensable in this regard: (1) enable developing countries to be involved in standard setting so they can participate more fully in world trade (this is on the agenda of the implementation issues under the Doha Round; (2) provide developing countries with systematic information and substantially more training and resources on a regular and predictable basis to comply with new standards and regulations governing their exports; and (3) formulate a balanced approach towards disciplining arbitrariness and discretion in the use of such barriers.

## Annex I

### UNCTAD CODING SYSTEM FOR TRADE CONTROL MEASURES

<b>1000</b>	<b>TARIFF MEASURES</b>
1100	STATUTORY CUSTOMS DUTIES
1200	MFN DUTIES
1300	GATT CEILING DUTIES
1400	TARIFF QUOTA DUTIES
1410	Low duties
1420	High duties
1500	SEASONAL DUTIES
1510	Low duties
1520	High duties
1600	TEMPORARY REDUCED DUTIES
1700	TEMPORARY INCREASED DUTIES
1710	Retaliatory duties
1720	Urgency and safeguard duties
1900	PREFERENTIAL DUTIES UNDER TRADE AGREEMENTS
1910	Interregional agreements
1920	Regional and subregional agreements
1930	Bilateral agreements
<b>2000</b>	<b>PARA-TARIFF MEASURES</b>
2100	CUSTOMS SURCHARGES
2200	ADDITIONAL TAXES AND CHARGES
2210	Tax on foreign exchange transactions
2220	Stamp tax
2230	Import licence fee
2240	Consular invoice fee
2250	Statistical tax
2260	Tax on transport facilities
2270	Taxes and charges for sensitive product categories
2290	Additional charges n.e.s.
2300	INTERNAL TAXES AND CHARGES LEVIED ON IMPORTS
2310	General sales taxes
2320	Excise taxes
2370	Taxes and charges for sensitive product categories
2390	Internal taxes and charges levied on imports n.e.s.
2400	DECREED CUSTOMS VALUATION
2900	PARA-TARIFF MEASURES N.E.S.

- 3000 PRICE CONTROL MEASURES**
  - 3100 ADMINISTRATIVE PRICING
    - 3110 Minimum import prices
    - 3190 Administrative pricing n.e.s.
  - 3200 VOLUNTARY EXPORT PRICE RESTRAINT
  - 3300 VARIABLE CHARGES
    - 3310 Variable levies
    - 3320 Variable components
    - 3330 Compensatory elements
    - 3340 Flexible import fees
    - 3390 Variable charges n.e.s
  - 3400 ANTIDUMPING MEASURES
    - 3410 Antidumping investigations
    - 3420 Antidumping duties
    - 3430 Price undertakings
  - 3500 COUNTERVAILING MEASURES
    - 3510 Countervailing investigations
    - 3520 Countervailing duties
    - 3530 Price undertakings
  - 3900 PRICE CONTROL MEASURES N.E.S.
- 4000 FINANCE MEASURES**
  - 4100 ADVANCE PAYMENT REQUIREMENTS
    - 4110 Advance import deposit
    - 4120 Cash margin requirement
    - 4130 Advance payment of customs duties
    - 4170 Refundable deposits for sensitive product categories
    - 4190 Advance payment requirements n.e.s.
  - 4200 MULTIPLE EXCHANGE RATES
  - 4300 RESTRICTIVE OFFICIAL FOREIGN EXCHANGE ALLOCATION
    - 4310 Prohibition of foreign exchange allocation
    - 4320 Bank authorization
    - 4390 Restrictive official foreign exchange allocation n.e.s.
  - 4500 REGULATIONS CONCERNING TERMS OF PAYMENT FOR MPORTS
  - 4600 TRANSFER DELAYS, QUEUING
  - 4900 FINANCE MEASURES N.E.S.
- 5000 AUTOMATIC LICENSING MEASURES**
  - 5100 AUTOMATIC LICENCE
  - 5200 IMPORT MONITORING
    - 5210 Retrospective surveillance
    - 5220 Prior surveillance
    - 5270 Prior surveillance for sensitive product categories
  - 5700 SURRENDER REQUIREMENT
  - 5900 AUTOMATIC LICENSING MEASURES N.E.S.

**6000 QUANTITY CONTROL MEASURES**

**6100 NON-AUTOMATIC LICENSING**

- 6110 Licence with no specific ex-ante criteria
- 6120 Licence for selected purchasers
- 6130 Licence for specified use
  - 6131 Linked with export trade
  - 6132 For purposes other than exports
- 6140 Licence linked with local production
  - 6141 Purchase of local goods
  - 6142 Local content requirement
  - 6143 Barter or counter trade
- 6150 Licence linked with non-official foreign exchange
  - 6151 External foreign exchange
  - 6152 Importers' own foreign exchange
- 6160 Licence combined with or replaced by special import authorization
- 6170 Prior authorization for sensitive product categories
- 6180 Licence for political reasons
- 6190 Non-automatic licensing n.e.s.

**6200 QUOTAS**

- 6210 Global quotas
  - 6211 Unallocated
  - 6212 Allocated to exporting countries
- 6220 Bilateral quotas
- 6230 Seasonal quotas
- 6240 Quotas linked with export performance
- 6250 Quotas linked with purchase of local goods
- 6270 Quotas for sensitive product categories
- 6280 Quotas for political reasons
- 6290 Quotas n.e.s.

**6300 PROHIBITIONS**

- 6310 Total prohibition
- 6320 Suspension of issuance of licences
- 6330 Seasonal prohibition
- 6340 Temporary prohibition
- 6350 Import diversification
- 6370 Prohibition for sensitive product categories
- 6380 Prohibition for political reasons (embargo)
- 6390 Prohibitions n.e.s.

**6600 EXPORT RESTRAINT ARRANGEMENTS**

- 6610 Voluntary export restraint arrangements
- 6620 Orderly marketing arrangements
- 6630 Multifibre arrangement (MFA)
  - 6631 Quota agreement
  - 6632 Consultation agreement
  - 6633 Administrative co-operation agreement
- 6640 Export restraint arrangements on textiles outside MFA
  - 6641 Quota agreement
  - 6642 Consultation agreement
  - 6643 Administrative co-operation agreement
- 6690 Export restraint arrangements n.e.s.

6700 ENTERPRISE-SPECIFIC RESTRICTIONS  
6710 Selective approval of importers  
6720 Enterprise-specific quota  
6790 Enterprise-specific restrictions n.e.s.

6900 QUANTITY CONTROL MEASURES N.E.S.

**7000 MONOPOLISTIC MEASURES**

7100 SINGLE CHANNEL FOR IMPORTS  
7110 State trading administration  
7120 Sole importing agency  
7170 Single channel for sensitive product categories

7200 COMPULSORY NATIONAL SERVICES  
7210 Compulsory national insurance  
7220 Compulsory national transport

7900 MONOPOLISTIC MEASURES N.E.S.

**8000 TECHNICAL MEASURES<sup>23</sup>**

8100 TECHNICAL REGULATIONS  
8110 Product characteristics requirements  
8120 Marking requirements  
8130 Labelling requirements  
8140 Packaging requirements  
8150 Testing, inspection and quarantine requirements  
8160 Information requirements  
8170 Requirement relative to transit  
8180 Requirement to pass through specified customs  
8190 Technical regulations n.e.s.

8200 PRE-SHIPMENT INSPECTION  
8300 SPECIAL CUSTOMS FORMALITIES  
8400 RETURN OBLIGATION  
8900 TECHNICAL MEASURES N.E.S.

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<sup>23</sup> The measures for sensitive product categories, with codes ending in 7\*, are further subdivided according to specific purposes if appropriate: (1) to protect human health (71); (2) to protect animal health and life (72); (3) to protect plant health (73); (4) to protect environment (74); (5) to protect wildlife (75); (6) to control drug abuse (76); (7) to ensure human safety (77); (8) to ensure national security (78); and (9) for purposes n.e.s. (79). The technical regulations are subdivided according to specific purposes, in the same way as the measures for sensitive product categories: 8111, 8121, etc. for protection of human health; 8112, 8122, etc. for protection of animal, health and life, etc.

## Annex II.

### LIST OF COUNTRIES/TERRITORIES COVERED BY NTB DATA IN UNCTAD TRAINS, WITH LATEST AVAILABLE YEAR

Developing Africa		Developing America		Developing Asia		Developed countries	
Algeria	2002	Argentina	2003	Bahrain	2002	Australia	1999
Burkina Faso	1997	Bolivia	2003	Bangladesh	2000	Canada	2000
Cameroon	1997	Brazil	2003	Bhutan	1999	Czech Republic	1999
Central African Republic	1997	Chile	2003	Brunei Darussalam	2004	Estonia	1996
Chad	1997	Colombia	2003	Cambodia	2003	European Union	1999
Côte d'Ivoire	2001	Costa Rica	2002	China	2001	Hungary	1999
Egypt	2001	Cuba	2003	Hong Kong, China	1994	Iceland	1996
Equatorial Guinea	1998	Ecuador	2003	India	1997	Japan	2004
Ethiopia(excludes Eritrea)	1995	El Salvador	2002	Indonesia	2003	Latvia	1996
Gabon	1994	Guatemala	2002	Jordan	2001	Lithuania	1999
Ghana	1995	Honduras	2003	Korea, Republic of	1996	New Zealand	1999
Kenya	1993	Mexico	2003	Lao PDR	2004	Norway	1996
Madagascar	1995	Nicaragua	2003	Lebanon	1999	Poland	1999
Malawi	1996	Paraguay	2003	Malaysia	2003	Slovenia	1999
Mali	1995	Peru	2003	Myanmar	2004	Switzerland	1996
Mauritius	1995	Trinidad and Tobago	1992	Nepal	1998	United States	1999
Morocco	2001	Uruguay	2003	Oman	1999		
Mozambique	1994	Venezuela	2003	Pakistan	1998	<b>Countries in Transition</b>	
Nigeria	2001			Papua New Guinea	1997	Belarus	1996
Rwanda	1994			Philippines	2001	Kazakhstan	1999
Senegal	2001			Saudi Arabia	1999	Kyrgyz Republic	1998
South Africa	1999			Singapore	2001	Moldova	1995
Sudan	2001			Sri Lanka	2004	Romania	1999
Tanzania	2001			Taiwan, Province of China	2001	Russian Federation	1997
Tunisia	2002			Thailand	2003	Ukraine	1997
Uganda	1993			Turkey	1997		
Zambia	1993			Viet Nam	2004		
Zimbabwe	1997						

### Annex III

#### CATEGORIES USED IN THE WTO'S MOST RECENT INVENTORY OF NON-TARIFF MEASURES<sup>24</sup>

Parts and sections	Description
Part I	<u>Government participation in trade and restrictive practices tolerated by Governments</u>
A	Government aids, including subsidies and tax benefits
B	Countervailing duties
C	Government procurement
D	Restrictive practices tolerated by Governments
E	State trading, government monopoly practices, etc.
Part II	<u>Customs and administrative entry procedures</u>
A	Anti-dumping duties
B	Customs valuation
C	Customs classification
D	Consular formalities and documentation
E	Samples
F	Rules of origin
G	Customs formalities
H	Import licensing
I	Preshipment inspection
Part III	<u>Technical barriers to trade</u>
A	General
B	Technical regulations and standards
C	Testing and certification arrangements
Part IV	<u>Sanitary and phytosanitary measures</u>
A	General

<sup>24</sup> Negotiating Group on Market Access, WTO doc. TN/MA/S/5/Rev.1, 28 November 2003.

Parts and sections	Description
B	SPS measures including chemical residue limits, disease freedom, specified product treatment, etc.
C	Testing, certification and other conformity assessment
Part V	<u>Specific limitations</u>
A	Quantitative restrictions
B	Embargoes and other restrictions of similar effect
C	Screen-time quotas and other mixing regulations
D	Exchange controls
E	Discrimination resulting from bilateral agreements
F	Discriminatory sourcing
G	Export restraints
H	Measures to regulate domestic prices
I	Tariff quotas
J	Export taxes
K	Requirements concerning marking, labelling and packaging
L	Others
Part VI	<u>Charges on imports</u>
A	Prior import deposits
B	Surcharges, port taxes, statistical taxes, etc.
C	Discriminatory film taxes, use taxes, etc.
D	Discriminatory credit restrictions
E	Border tax adjustments
Part VII	<u>Other</u>
A	Intellectual property issues
B	Safeguard measures, emergency actions
C	Distribution constraints
D	Business practices or restrictions in the market
E	Other