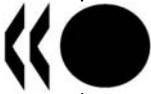


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ISSUES OF DUAL USE AND REVIEWING PRODUCT COVERAGE OF ENVIRONMENTAL GOODS

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ABSTRACT

Importing "environmental" goods which are also used for other than environmental purposes and ensuring that they represent the most appropriate technology for a particular environmental problem are key concerns to be addressed in the approaches currently being discussed under paragraph 31(iii) of the Doha Agenda. By drawing lessons from experiences with WTO sectoral agreements such as the Agreements on Information Technology (ITA), Trade in Pharmaceutical Products and Trade in Civil Aircraft as well as relevant national schemes, this paper explores possible options to address these two issues.

Keywords: environmental goods, trade and environment, WTO

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EXECUTIVE SUMMARY

This paper addresses two of the key challenges in the on-going negotiations on environmental goods: 1) dual and multiple use of environmental goods; and 2) a review process of product coverage. Several options are explored to address these issues by building on the experiences with existing sectoral agreements such as the Agreements on Information Technology, Trade in Pharmaceutical Products and Trade in Civil Aircraft as well as of a relevant national scheme.

The study reveals that 'ex-outs' may probably be used as a complement to other options in dealing with the issue of dual and multiple uses of environmental goods. Given the intrinsic nature of multiple uses of environmental goods, identifying environmental goods based on their end use at customs would appear to be inevitable should countries wish to screen out products that are not used for environmental purposes. A drawback of this option is that it imposes an additional compliance burden on customs authorities as it requires post-clearance audits. Once some statistical data base on the end-use of products is established through the customs administration, it is conceivable that countries could set an artificial threshold and allow special customs clearance procedures for products that are predominantly used for environmental purposes.

The paper also examines the review processes of product coverage of several sectoral agreements and examines lessons appearing relevant for environmental goods. Technical consultation and precise classification appear to be key to a successful review process. It was also highlighted that an efficient and timely review mechanism is vital to maximise the benefits that might accrue from liberalising trade in environmental goods. To this end, engaging the private sector in the review process deserves serious consideration.

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ISSUES OF DUAL USE AND REVIEWING PRODUCT COVERAGE OF ENVIRONMENTAL GOODS

Introduction

In 2001, Ministers in Doha agreed, *inter alia*, to “negotiations on the reduction, or as appropriate elimination, of tariff and non-tariff barriers to environmental goods and services, with a view to enhancing the mutual supportiveness of trade and environment”. Since then, Members have strived to find a common ground that would balance the environmental, developmental and trade gains in the negotiations. As Ministers at the WTO Hong Kong Ministerial Meeting in December 2005 instructed Members to “complete work expeditiously under paragraph 31(iii) of the Doha Agenda”, negotiations in the Special Session of the Committee on Trade and Environment (CTESS) have been focusing on parameters to identify environmental goods that can benefit from reductions or elimination of tariffs. Given the absence of an agreement on the definition of “environmental goods”, divergence among WTO Members over the parameters and the approaches to take to liberalising environmental goods still remains large and Members are still grappling with several issues.¹

At its 30 November-1 December 2005 meeting, the Joint Working Party on Trade and Environment (JWPTE) solicited a scoping paper from the Secretariat on *Further work on environmental goods and services*. As proposed in the scoping paper [COM/ENV/TD(2006)6] and supported by Delegates, this paper intends to address the following two key challenges to the on-going negotiations on environmental goods:

- What options are available to address the dual and multiple end uses of environmental goods?
- What possible measures are available to take account of technological change in liberalising trade in environmental goods?

While the series of issues around these two questions arise to varying degrees, importing environmental goods with other uses and ensuring the most appropriate technology for a particular environmental problem are concerns to be addressed in all approaches currently being debated under 31(iii) in the CTESS. By drawing lessons from experiences with other sectoral agreements such as the Agreements on Information Technology (ITA), Trade in Pharmaceutical Products and Trade in Civil Aircraft as well as of relevant national schemes, this paper aims to explore possible options to address

¹ Three approaches have been proposed by WTO Members so far: the list approach (European Communities, Canada, Japan, Korea, New Zealand, Qatar, Switzerland, Chinese Taipei and the United States), the environmental project approach (India) and the integrated approach (Argentina). According to the list approach, products included in the agreed list would benefit from tariff reductions, while according to the environmental project approach products only qualify for tariff concessions if the project is approved by a Designated National Authority. The integrated approach sets out two conditions to be met in order to benefit from tariff concessions; 1) the goods must be included in one of the environmental project categories to be identified by the CTESS; and 2) the CTESS would then include in each category the “environmental goods” that would be available for application to the development of national projects (WTO, 2005c).

these two issues. In considering these options, questions of the practicality of various options for customs procedures are examined. However, no conclusions are drawn in this paper as to the direct applicability of one or another option in the context of Doha 31 (iii) negotiations.²

Options to address the issue of dual use

The aspect of dual or multiple use is intrinsic to environmental goods; only a few products are solely used for environmental purposes (e.g. wind turbines) at least at the level of HS 6 digit, while many more single use environmental products can be identified at the lower level. As many of products that are used for environmental protection and improvement are also used for other purposes, the benefits of liberalising trade in environmental products will be limited if dual or multiple use goods are to be excluded categorically. In order to reap the maximum benefits of liberalising environmental goods for all Members therefore, it is critical to find an appropriate approach to ensure that those products being used for environmental purposes benefit from agreed liberalisation.

A few options appear worth considering in addressing the issue of dual and multiple uses of environmental goods. In this section, these options will be closely examined taking account of their merits as well as their limitations. At the outset, it should be noted that no option is without limitations as some of the options require the creation of additional procedures or bring about institutional consequences, which imply administrative burden in their implementation. At the end, it is left to Members to decide which options are worth considering in order to address the key challenges and to move the negotiations forward.

Option 1: Use of ‘ex-outs’

The problem of dual or multiple uses is not reserved to “environmental goods”.³ It arises in part due to lack of specificity of the World Customs Organisation (WCO)’s Harmonized Commodity Description and Coding System (HS) sub-headings at the 6-digit level. While the HS comprises approximately 5000 commodity groups, it does not capture every product that might enter international trade by assigning a unique code.⁴ Therefore, the same 6-digit HS codes cover some goods that are not “environmental”. For this reason, several countries have proposed products with reference to ‘ex’ headings.⁵ For instance, the United States has proposed “machines of a kind for use in screening and washing coal” which are included under the 6-digit HS sub-heading 8474.10, “sorting, screening, separating or washing machines”. Similarly,

² Information presented in this paper is based on interviews with the secretariats of the sectoral agreements at the WTO, the WCO, customs experts and the Ministry of Housing, Spatial Planning and the Environment Strategy and Policy Affairs Directorate, Department of Economics and Technology in the Netherlands.

³ For instance, the Agreement on Trade in Pharmaceutical Products also covers products that are used for non-pharmaceutical purposes and so does the Information Technology Agreement (ITA). Thus, the issue of dual or multiple uses of products was invariably raised during the negotiation of these sectoral agreements.

⁴ It is worth noting that the HS at the 6-digit level is not intended to capture every product. Instead, it has residual headings and sub-headings (i.e. “other”) to capture products that are not captured in the HS sub-headings at the six digit level. The lack of specificity of HS sub-headings however can be a source of conflicting interpretation by customs, since it is not always clear to customs authorities-especially for new products-which HS heading should be used. As well, similar goods can fall under two or more headings sometimes, depending on their technical characteristics.

⁵ Normally, every country has the flexibility to define the number of tariff lines in the HS Classification at greater than the HS 6-digit level. The use of ‘ex-outs’, a more detailed classification scheme is essentially how APEC economies chose to deal with the issue as the APEC Early Voluntary Sectoral Liberalisation (EVSL) product list also had to grapple with environmental goods with multiple uses (OECD, 2005a).

Japan has proposed “ultrasonic dish-washing machines” as an “ex-heading” product under HS 8422.11, “Dish washing machines...of the household type” (OECD, 2005a).

In operationalising the use of ‘ex-outs’, two options are conceivable. One is to incorporate ex-heading products in the HS by expanding the HS beyond the 6-digit level. The other option is to create ex-headings in national nomenclatures.

The first option would however not be viable in the short term due to the timing of the WCO’s review cycles. The amendments of the HS are considered by the WCO’s Council every five years with implementation taking place from one to two years following notification to members. The latest amendment was approved in June 2004 and its implementation will enter into force on 1 January 2007, which means that any new amendments not included in the current set will not be implemented before 2012.⁶ In short, any amendment of the HS before concluding an agreement on environmental goods is unlikely. Alternatively, recommendations could be issued annually by the World Customs Organisation (WCO) to amend national tariff and statistical nomenclatures on an interim basis, but these recommendations do not have binding power over Contracting Parties to the HS Convention and the status of such an ‘interim’ solution is questionable.

The second option is for countries to establish additional subdivisions in their national customs nomenclatures. Once agreed at the international level to reduce duties on certain products, creating ex-headings under the each of HS sub-heading at the national level is technically viable. An example can be found in the EC list of *international, non-proprietary names, provided for pharmaceutical substances by the World Health Organisation*, which are free of duty. This list is annexed to the EC nomenclature and these ex-headings range from 8 to 16 digits.

Since each country has different sub-headings within its national customs nomenclature, for this option to be considered, countries should agree on a process to ensure the consistency of the product description and encoding of ‘ex-heading’ goods across countries. To this end, an analysis across national customs nomenclatures would be necessary.⁷ Lack of transparency in classifying 8-to 10-digit products has led to disagreements between customs officials and traders.⁸ Experiences with the ITA also reveal that issues of interpretation involved with classification have arisen due to inconsistent product descriptions and encoding of ‘ex-heading’ goods at the national level. Therefore it is critical to ensure that there are no conflicting ex-headings across countries (in other words, that no country is using a specific ex-heading to classify two or more different products).⁹

⁶ Implementation at the international level undoubtedly takes substantial amount of time since customs authorities around the world have to reflect the changes to the HS in their national nomenclatures.

⁷ According to an analysis of the proposed ex-heading goods in the Air Pollution Control area for selective national nomenclatures, it appears that many countries have yet to have ex-headings beyond 6-digits that capture the proposed descriptions of products in their national nomenclatures. For a handful of countries that have 8-10 digit ex-headings for these products, the descriptions are often similar or identical to the proposed descriptions of ex-heading products in this area. Thus, it is less likely that disagreements over the interpretation of classification at the national level arise as long as countries ensure consistency in the ex-headings in their national nomenclatures.

⁸ Some of the submitted descriptions of ex-heading products may not have been approved by the customs experts. In order to avoid any potential disputes over the interpretation of classification at customs, there is a need for further specifying the descriptions in consultation with customs experts.

⁹ Relevant authorities at the national level (either customs office or relevant government ministries) can create appropriate ex-headings for products that are consistent across countries

As mentioned earlier, the issue of dual or multiple uses is very often intrinsic to the nature of environmental goods. Many environmental products, if adequately specified, can be identified by using ex-outs. However, it cannot be ruled out that many of the proposed 'ex-heading' products can still be used for other than environmental purposes (e.g. 'separators, precipitators' ex-outs of HS 701990 'Glass fibres other than slivers, rovings, yarn, chopped strands, webs, mats, thin sheets, mattresses, boards and similar nonwoven products'). In addition, use of 'ex-outs' is likely to result in a proliferation of domestic sub-headings and achieving the level of international consistency still remains a challenge if ex-headings are to be created in national nomenclatures. Therefore, if countries intend to exclude any products that might be used for anything but environmental purposes, it is worth considering the possibility of identifying environmental goods on their end use at customs, while using ex-outs on a complementary basis.

Option 2: Identifying goods according to their end use

The fundamental logic behind an agreement on environmental goods is to provide an incentive to differentiate imports on the basis of their end use. In fact, precedents for differentiating products according to their end use for customs purposes have already been set. For instance, the 1973 Agreement on Trade in Civil Aircraft creates end-use procedures to identify products being used for aircraft. The agreement accorded duty-free or duty-exempt treatment to an agreed list of products under the condition that "if such products are for use in civil aircraft or ground-flying trainers and for incorporation therein, in the course of their manufacture, repair, maintenance, rebuilding, modification or conversion". Accordingly, the EC for example has laid down a mechanism to identify these products based on their end use at customs. Articles 291 to 300 of Commission Regulation (EEC) No. 2454/93 (OJ L 253, 11.10.1993, p.1) and subsequent amendments state that 'the relief from customs duties shall be subject to the conditions laid down in the relevant Community provisions with a view to customs control of the use of such goods' (EC, 2005).¹⁰

A number of criteria can be used to identify environmental products based on their end-use for customs purposes. For instance, environmental goods may in some cases be distinguishable from otherwise like products based on their physical or chemical features. For components used for civil aircraft, the agreement further specifies the coverage by restricting it to products "...[that have] the essential character of a complete or finished part, component, sub-assembly or item of equipment of a civil aircraft or ground flying trainer (e.g. an article which has a civil aircraft manufacturer's number), materials in any form (e.g. sheets, plates, profile shapes, strips, bars, pipes, tubes or other shapes) unless they have been cut to size or shape and/or shaped for incorporation in civil aircraft or a ground flying trainer (e.g. an article which has a civil aircraft manufacturer's part number).¹¹

Often, however, a characteristic that is not readily observable to a customs agent is used to differentiate parts, components, equipment and even materials. Alternatively, artificial distinction could be used to a limited extent to distinguish environmental products at the customs. A good example is the common practice of tax authorities to place dyes or trace chemicals in diesel fuel used for off-road purposes. Another example is to inscribe serial numbers on motors used for aircraft. In this case, importers of the motors must declare the end use at customs and receive permissions from the customs for duty relief (e.g. importers declare at the customs that 2 out of 10 motors they import will be installed in aircraft).¹²

¹⁰ In order to keep the end-use procedures transparent, Parties to the agreement are required to notify any changes on end-use procedures. This is also to avoid non-tariff barriers (NTBs) involved with this procedure. For the same reason, Parties are requested to submit trade statistics on the end-use of products at the customs, but it stopped in 2002 due to lack of compliance and need for that.

¹¹ Annex para 2 of the agreement.

¹² Customs clearance procedures can be provided almost immediately after the trader has completed information requirements on the end-use of imported products through on a self-declaration.

Decisions on implementation of paragraph 6 of the Doha Declaration on the TRIPs Agreement and public health also include the use of artificially distinguishing features to control Trade in Pharmaceutical Products produced under compulsory licence. According to paragraph 2(b) (ii) of the decision:

(ii) Products produced under the licence shall be clearly identified as being produced under the system set out in this Decision through *specific labelling or marking*. Suppliers should distinguish such products through *special packaging* and/or *special colouring/shaping* of the products themselves, provided that such distinction is feasible and does not have a significant impact on price. (WTO, 2003)

This mechanism should then be accompanied by a post-clearance audit to ensure compliance. In fact, the use of post-clearance audits has been encouraged as a compliance measure for trade facilitation purposes since it allows traders to conform to the customs requirements while simplifying customs procedures. Through such a complementary measure, special customs procedures can be accorded to authorised traders for instance, facilitating the expeditious movement of goods at the border. The private sector also benefits from this measure by reducing its demurrage expenses since the controls can be carried out at a later stage, and corruption opportunities can be reduced by minimising direct transactions between officials and traders or their agents (OECD, 2002).¹³

Post-clearance audits can be done in two ways: reimbursement and non-payment. In the case of the latter, firms are subject to random physical and documentary inspection after the customs clearance and importers later on have to prove that the duty waived product is actually used for the declared purposes during the limited period of time. This can be done through measures such as paper work such as book-keeping or a brief report.

It is also worth noting though that customs' collections continue to represent a large portion of government revenue. According to the WCO, customs collects over 50 percent of all government revenue in many countries (WCO, 2003). Besides, any mechanisms that might be used for evading the payment of duty or taxes are likely to be employed by 'rogue importers' (McLinden, 2005). In addition, it is often the case in many developing countries that many importers do not operate out of offices and often disappear after customs clearance. As a result, maintaining effective records that allow the conduct of effective post-clearance audits is a big challenge. In this regard, upfront payment followed by reimbursement based on the evidence and records of the end-use might be preferable, particularly in developing countries. In this way, the onus is on the importers to keep records and demonstrate that the end-use was indeed "environmental".

Since not all traders could be audited, it is essential that customs authorities develop some means of identifying which importers should be subjected to post-clearance audits. In this regard, effective risk management infrastructure is critical for successful post-clearance audit and the 'end-use' administration.¹⁴ Through such a risk assessment system, those who posed the highest risk should be subjected to scrutiny first (Moise, 2004).

The 'end-use' option necessarily involves additional administrative procedures at customs and beyond, particularly given the large and diverse customer base for environmental goods. Since requirements for

¹³ The United Kingdom, for instance, has put the Customs Freight Simplified Procedures (CFSP) in place, to enable traders to obtain immediate release of the goods by filing only a minimum of information to customs at the frontier and submitting the bulk of fiscal and statistical information electronically at a later stage (OECD, 2002).

¹⁴ Risk assessment covers tariff classification, valuation and origin, goods declaration and cargo declaration, and special procedures for authorised traders. The Canadian Customs and Revenue Agency for instance has developed a Border Management Plan to assist field personnel to assess risk and establish appropriate levels of examination for travellers and commercial goods (Moise, 2004).

customs clearance vary across countries, unless the information concerning the end-use of imported products is already incorporated in the customs clearance documents, creating such documents could add to already bureaucratic customs procedures.¹⁵ In addition, undertaking post-clearance audits and risks assessment are undoubtedly a labour-intensive and costly exercise as they require a good database system and appropriate institutions to be put in place. Accordingly, resorting to this option not only adds more administrative burden to customs authorities but also imposes a heavy compliance management burden on customs administrations. This is even more so in developing countries as the infrastructure at customs in many developing countries is often limited. The burden of complying with customs requirements would also undoubtedly be greater for small and medium enterprises (SMEs). Therefore, if this option is to be considered and successfully implemented, it would require strengthening administrative capacity of customs authorities and building compliance capacity of SMEs.¹⁶

Option 3: Special customs clearance procedures

Alternatively, some customs experts have suggested that new tariff lines can be created for environmental goods by using Chapter 98 or 99 of the HS.¹⁷ Chapters 98 and 99 are both “reserved chapters”, which are not currently being used at the international level. For this option to be considered, however, environmental goods would need to be defined. In addition, it should be born in mind that this option is not viable in the short term due to the timing of the WCO’s review cycles.

While equipment used for the recycling or recovery of waste or for end-of-pipe pollution control involves the sale of entire plants, the machinery and their components arrive separately under separate tariff headings due to the absence of a separate tariff line for such plants. In this case, one way to efficiently capture all the components in a unique code is to create a separate status for an entire plant in the HS with end-use provisions.¹⁸ Since plants are usually imported disassembled, creating a separate status for whole plants in the HS requires special customs clearance procedures, which means that all the components enter the country through the same port of entry, are billed to the same importer, and are imported within a specified time period, or some combination thereof (OECD, 2005a).¹⁹

Precedents have already been set for food-processing plants (e.g. 8438.10 and 8438.20), brewery machinery (8438.40) and floating or submersible drilling or production platforms (8905.20). The existing structure of the HS itself however might impose a limitation to the creation of new tariff lines for whole plants. While the descriptions of separate tariff lines that countries may create in their own customs nomenclatures must be consistent with their corresponding HS headings and sub-headings, there are only a

¹⁵ In the case of the EC, existing customs clearance documents require information of the end-use of products that are used for aircraft.

¹⁶ Given that Parties to the Agreement on Trade in Aircraft are largely developed countries (although some developing countries joined the agreement later on as often it formed part of their accession requirements to the WTO), end-use system of customs administration was less likely to face problems such as limited capacity or infrastructure at customs.

¹⁷ These comments were provided by customs experts from the World Customs Organisation (WCO) as well as Professor David Widdowson of the Centre for Customs and Excise Studies of the University of Canberra.

¹⁸ This proposal was made by the EC (WTO, 2005b).

¹⁹ The creation of new tariff lines for whole plants would reduce future disputes over whether or not the agreement also covers parts and accessories (OECD, 2005a). The issue of including parts and accessories in the coverage has been hotly debated at the ITA.

handful of “functional” headings in the HS that can accommodate whole plants (OECD, 2005a).²⁰ Alternatively, Chapter 98 or 99 can also be used to create new tariff lines for whole plants.

Once some statistical data base on the end-use of products is established through the customs administration, countries may be able to set an artificial threshold and allow special customs clearance procedures for products that are predominantly used for environmental purposes. Albeit limited, customs statistics on the end-use of products are available in the existing two sectoral agreements: the Agreement on Civilian Air Craft; and the Agreement on Trade in Pharmaceutical Products. Precedents have also been set in these sectoral agreements. In the case of the Agreement on Trade in Pharmaceutical Products, for instance, negotiators agree to include a designated active pharmaceutical ingredient if more than half of its consumption was used in the product of finished pharmaceutical products (OECD, 2005a).²¹

A review process of product coverage

Environmental goods are constantly evolving. According to an OECD study, 50 percent of established environmental technologies will be replaced with new and different goods within 15 years (OECD, 1998). Keeping up with technological changes in liberalising environmental goods and services therefore, appears to be critical in fulfilling the spirit of the Doha Development Agenda mandate. If the set of environmental goods that are to be liberalised become obsolete and replaced over a short period of time, many of the anticipated benefits of liberalising markets for environmental goods and services would be undermined.

One way of addressing this issue is through a review process of product coverage.²² Given the evolving nature of environmental goods, this process is critical to ensuring an access of all WTO Members to the best available technologies to address environmental challenges. To this end, an efficient and workable periodic review mechanism needs to be devised.

Useful lessons can be drawn from sectoral agreements, as issues related to the advancement of technology are not confined to the environmental sector. Hence, sectoral agreements invariably have a mandate to review and update their product coverage on a regular basis. In this section, experiences of the Agreement on the International Technology Agreement (ITA), the Agreement on Trade in Civil Aircraft as well as the Agreement on Trade in Pharmaceutical Products will be discussed to understand; 1) how other periodic review mechanisms work; 2) what the major challenges to their operations are; and 3) what institutional arrangements are necessary to successfully implement these mechanisms. In addition, experiences with a national subsidy measure on environmental technologies might provide a useful insight on how to update the list of environmental goods. To this end, the case of “the Accelerated Depreciation of Environmental Investments Measure” in the Netherlands will be discussed with a view to emulating a similar review process for environmental goods at the national level. The lessons drawn from these

²⁰ Mainly whole plants fall under Chapter 84 (Nuclear reactors, boilers, machinery and mechanical appliances; parts therefore).

²¹ The customs statistics are often incomplete, though. For instance, the customs statistics submitted by the US only shows the customs values of the products, and often specific data for civil aircraft products cannot be obtained separately from that of military aircraft (WTO, 2002).

²² The idea that an agreed list of environmental goods should be considered a ‘living list’ and a process should be set up to update and expand the list was first suggested by New Zealand (WTO, 2005a) and referred to in the NAMA with support from the EC, Canada, Norway, Singapore, Switzerland, and the United States (WTO, 2006b).

experiences provide a basis to sketch out a review mechanism to reflect technological changes in environmental goods.

Experiences of sectoral agreements

In the case of the Agreement on Trade in Pharmaceutical Products, the WTO Members concerned agreed to meet under the auspices of the Council for Trade in Goods of the WTO at least once every three years unless otherwise decided to review the product coverage with a view to including, by consensus, additional pharmaceutical products for tariff elimination. The first review process took place over the period 30 November 1995 – 11 July 1996 through a series of meetings, which has resulted in extra products (465) in addition to the products (over 6000) already covered and receiving duty free treatment (WTO, 1998). So far, three revisions on the coverage of pharmaceutical products have taken place.

Prior to the review process, which takes place every two years, Parties to the Agreement consult the World Health Organisation (WHO) to update the list of products and a group of pharmaceutical companies to solicit inputs from the private sector.²³ The WHO then submits the list to the WCO to ensure that their classification is appropriate. Some Parties to the Agreement undergo domestic consultation with relevant stakeholders to review and update the product coverage.

During the first review process, it appeared that a small number of products (25), the predominant use of which turned out to be non-pharmaceutical, had been inadvertently included and received duty free treatment. Hence, Members concerned were asked to notify the WTO Secretariat of any changes they planned to make to their schedules “according to the existing procedures” specified under Article XXVIII of the General Agreement on Tariffs and Trade 1947 (WTO, 1996a).²⁴

Since its inception in 1979, the Agreement on Trade in Civil Aircraft has been reviewing its product coverage as mandated until 1996. However, after an attempt failed to negotiate a new agreement on Trade in Civil Aircraft during the Uruguay Round, the product coverage has not been updated except for once in 2001, when a review process took place to reflect the third edition of the HS. No new product was added nor outdated products removed during this review process. This has resulted in a Protocol (2001) which was intended to amend the product-coverage based on the revised HS, but it is yet to take effect, since only four signatories have adopted the protocol.²⁵

While it was mandated in the ITA that the product coverage review should take place every three years, the initial coverage has not been revised since its inception in 1996. A Committee of Participants on the Expansion of Trade in Information Technology Products has been created for a review process and a few countries had submitted an additional list of products to the committee for review, but no decision has been taken to accommodate them. The stalemate of the review process is largely attributable to the problem with the initial product coverage. The ITA product coverage constitutes two attachments: 1)

²³ The product coverage of the Agreement on Trade in Pharmaceutical Product consists of three Annexes: 1) designated pharmaceutical active ingredients (INN); 2) Prefixes and Suffixes for Salts, Esters and Hydrates of INNs; and 3) Salts, Esters and Hydrates of INN Active Ingredients which are not classified in the same HS heading as the Active ingredient (GATT, 1994). The INN was defined by the WHO and is revised by them every year. The revision is part of the review process of the product coverage.

²⁴ Removing a good that had already received duty free treatment from the product coverage of a tariff reduction or elimination agreement is likely to be done only for symbolic reasons since once a tariff is bound, it cannot be raised to an earlier, higher value, except through procedures specified under Article XXVIII of the General Agreement on Tariffs and Trade 1947 (OECD, 2005a).

²⁵ This is largely due to concern among the Parties that the subsidy provision in the newly agreed Protocol might be in conflict with the Subsidies and Countervailing Measures (SCM) Agreement.

attachment A contains a list of products with HS headings; and 2) attachment B contains merely a list of products without HS headings (WTO, 1996b). The source of problem is the attachment B product coverage. The WTO established a technical working group to classify the products on attachment B to the ITA, but disagreements within the group over their classification still remain large. The issue of classification has been referred to the WCO; the WCO is currently restructuring certain chapters and headings in the HS to accommodate these products, and simplifying classification in problem areas by providing separate status to important categories (WTO, 2000). Since Parties to the Agreement are still grappling with the classification of the current coverage, the review process has made little headway so far. It is also partially attributable to Parties' reluctance to enlarge the coverage at this stage, in large part due to the fact that they are keen on more countries to join the agreement.²⁶

In fact, as there is little progress on reviewing the current product coverage at the ITA forum, Parties are now proposing new products in the Non-Agricultural Market Access (NAMA) negotiations instead of enlarging the coverage through a review process. For instance, Japan together with Korea, Singapore and the US have proposed liberalisation of the 'electronic/electrical sector' to be opened in the NAMA negotiation. Semi-conductors, home electronics, and MP3 players have also been proposed for inclusion in the NAMA negotiation (WTO, 2006a). Under the circumstances, Parties to the ITA have yet to reach the stage of discussing technical and practical customs issues.

Experiences with a national subsidy measure on environmental technology may also shed useful light on devising a mechanism to update the product coverage. In 1991, "the Accelerated Depreciation of Environmental Investments Measures (VAMIL)" has been introduced on the initiative of the Dutch Parliament to promote the dissemination and market introduction of newly developed environmental technologies by replacing environmentally less friendly technologies with more benign ones. It is a tax facility offering companies the opportunity to apply accelerated depreciation on environmentally friendly equipment. If the equipment is operational and fully paid for, it even allows depreciation of the full purchase price in the year when the equipment is acquired. This provides an attractive liquidity and interest gain for these companies.

Accelerated depreciation is only applicable to equipments that are specified on a so-called 'VAMIL list' which is updated every year by the Ministry of Environment.²⁷ The updating of the list involves the removal of equipments that have become widely accepted and the addition of new environmentally-friendly technologies. As compared to the 1992 list, the 1993 list grew from some 180 to approximately 280 equipments (IISD, 2006).²⁸ While the list is updated by the Ministry of Environment, it has often been the case that the suppliers of new environmental technologies drew government's attention to their new products to replace environmentally less friendly technologies. In other words, the VAMIL allows companies to depreciate certain environmental technologies of their choice. A similar scheme might be conceivable for updating the list of environmental goods at the national level by having the suppliers of environmental technologies involved with the review process. For instance, each Member country can

²⁶ Initially it started with 37 countries and now it has increased to 67 countries.

²⁷ To be eligible for the VAMIL list, equipments should: be clearly defined for fiscal purposes; have relatively good environmental impacts; not yet be widely accepted in the Netherlands; have no negative side effects, such as excessive energy use; and have a substantial potential market (IISD, 2006).

²⁸ The 1993 list, for example, contained elements aimed at reducing water, soil and air pollution, noise emissions, waste production and energy use. In the multilateral context of bound tariff amendment, it would be more a question of adding a new product for lower or zero import tariffs rather than returning to higher tariff levels.

establish a network of suppliers of their environmental products and consolidate their inputs to review and update the list.²⁹

Lessons learned

While experiences of sectoral agreements on reviewing and updating the product coverage reveal a number of different challenges that each agreement is facing, it should be noted at the outset that in large part, these challenges are case-specific and do not necessarily imply difficulties involved with operationalising a review process itself. A number of useful lessons can be drawn from the experiences on what needs to be considered in keeping the list of environmental goods current.

First, precise classification of the initial product coverage under the HS should be done before finalising an agreement.³⁰ Experience with the ITA shows that a review process of the product coverage will be hampered unless the initial product coverage is properly classified in consultation with relevant bodies.

Second, given the technical complexity involved with the nature of environmental goods and their classification, technical consultation with relevant institutions including most of the observer intergovernmental organisations (IGOs) has to be arranged prior to a review process. Unlike the case of the Agreement on Trade in Pharmaceutical Products, there is no single institution that has all the expertise concerning environmental products. However, a number of relevant institutions and stakeholders can be identified to facilitate a review process. For instance, consultation with relevant MEAs Secretariats can be instrumental in reviewing the product coverage as some of the proposed environmental products might be relevant to the coverage of certain MEAs.³¹ In reviewing the product coverage, agreeing on the classification of new products will continuously be a challenge as countries may disagree as to the HS sub-headings under which new products should be classified. In addition, different interpretation of classification at the border can lead to disagreements and disputes among countries in terms of applying the agreed tariff rates, resulting in poor implementation of the Agreement.³²

Therefore, consultation with the WCO on classification is particularly important to successful implementation of the agreement in the long term. Experience with the Agreement on Trade in Pharmaceutical Products also reveals the importance of engaging the private sector in the review process. An ad hoc technical expert group could be formed with representatives from relevant institutions to facilitate a review process.

Third, experiences with the Agreement on Trade in Pharmaceutical Products and the ITA highlight the importance of devising a timely and efficient review process. Given that removing products from the

²⁹ In the multilateral context of bound tariff amendment, it would be more a question of adding a new product for lower or zero import tariffs rather than returning to higher tariff levels. .

³⁰ At this point in the negotiation, there is neither an agreement on the list of environmental goods nor on the approach to take to liberalising trade in environmental goods and services.

³¹ Which MEAs Secretariats should be involved with a review process depends on the product coverage that Members would agree on eventually, but the Secretariats of the Climate Change Convention, the Basel Convention, and the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade might be relevant to products proposed in the renewable energy, solid waste and waste water management sectors.

³² So far, no dispute case over the interpretation of classifying information technology products has been submitted to the DSM since Parties tend to solve dispute among themselves as they try to take more members on board. This implies that the implementation of sectoral agreements with small number of Parties tends to be weak.

existing coverage can be done only for symbolic reasons, a timely and efficient review process is critical to ensure that new and cleaner technologies would get equal or full duty free benefit as those that are to be removed from the list.

Given the pace of technological changes in the environmental industry, it is desirable for a review process to take place every 2-3 years.³³ As seen in the case of the ITA, a Committee of Participants on the Expansion of Trade in Environmental Goods, for instance can be created under the CTE for a review process. Prior to a review process, consultation with an ad hoc technical expert group could be encouraged.

Concluding remarks

This paper has explored several options to address the two key challenges to the on-going negotiations on environmental goods: 1) dual and multiple use of environmental goods and 2) a review process of product coverage. It is based, *inter alia*, on experience with existing sectoral agreements.

First, 'ex-outs' may probably be used at best as a complement to other options in dealing with the issue of dual and multiple uses of environmental goods. If countries decide to use 'ex-outs', the plausible option would appear to be to establish additional sub-divisions in their national customs nomenclatures under the condition that the product description and encoding of 'ex-heading' goods across the national nomenclatures are consistent, so that including 'ex' heading products would not cause classification problems at the border.

Second, given the intrinsic nature of dual or multiple uses of environmental goods, identifying environmental goods based on their end use at customs would appear to be inevitable should countries wish to screen out products that are not used for environmental purposes. Several precedents can be found in existing sectoral agreements where 'end-use' based product distinction is being practiced. A number of criteria including artificial physical distinctions combined with special customs clearance and customs declaration can be employed to identify products based on their end use. The 'end-use' option necessarily requires post-clearance audits which are being encouraged as a compliance mechanism in the context of trade facilitation. A drawback of this option, however, is that it imposes a heavy compliance management burden on customs authorities. It would thus necessarily require strengthening the capacity of customs authorities to a substantial degree to ensure the compliance.

Third, once some statistical data base on the end-use of products is established through the customs administration, it is conceivable that countries could set an artificial threshold and allow special customs clearance procedures for products that are predominantly used for environmental purposes.

This being said, there will undoubtedly be trade offs between the degree to which dual use products can be screened out and the feasibility of its application at the practical level. Ultimately, it is up to WTO Members to find the balance between the two.

Finally, experience with several sectoral agreements shows that technical consultation and precise classification are the key to a successful review process. An efficient and timely review mechanism is vital to maximise the benefits that might accrue from trade liberalisation of environmental goods. To this end, engaging the private sector at the national level in the review process deserves serious consideration.

³³ On average, review processes of other sectoral agreements also take place every 2-3 years.

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