An Investigation into the Measures Affecting the Integration of ASEAN's Priority Sectors (Phase 1) REPSF Project No. 04/011 Author: Centre for International Economic Studies, The University of Adelaide¹

Final Report

April 2006

The views expressed in this report are those of the authors, and not necessarily those of the ASEAN Secretariat and/or the Australian Government

¹ Philippa Dee provided a draft of material for the services section. Risti Permani provided research assistance and Christopher Findlay and Risti Permani compiled the report. This version incorporates responses to comments on an earlier draft by Peter Lloyd.

CONTENTS

CONTENTS	l
INTRODUCTION	1
Trade in Goods: Tariff Measures	
Non-Tariff Measures	4
a. Baldwin Classification	
b. Laird and Vossenaar Classification	5
c. Deardorff and Stern Classification	
d. UNCTAD Classification	
e. Work in ASEAN on NTMs	7
SURVEY METHODS AND THE SIGNIFICANCE OF NTMS	9
(i) Desk Phase	9
(ii) Field Work Phase	
(iii) Priorities for Action and Measurement of Price Effects	12
(iv) Links to Trade Facilitation	13
METHODS OF MEASUREMENT OF SERVICES BARRIERS	15
Investment	
Next Steps – Proposal for Phase 2	
BIBLIOGRAPHY	21
APPENDIX 1: ASEAN NTM CLASSIFICATION	26
APPENDIX 2: UNCTAD CODING SYSTEM OF TRADE CONTROL MEASURES	27
APPENDIX 3: FINAL VERSION OF THE QUESTIONNAIRE ON THE INTERNAL M	ARKET
	30

INTRODUCTION

The strategic goal of economic integration by 2020 is an ASEAN Community that is a single market and production base with a free flow of goods, services, labour, capital, and investment. A single market is an area in which there is no discrimination in the markets for commodities and for factors against foreign goods, services, or capital and labour.

Lloyd and Smith (2004) define the creation of a single market in terms of the application of the Law of One Price holding in all markets. They note that achieving this goal requires elimination of both border and beyond-the-border measures that discriminate against foreigners. This involves the application of the principle of national treatment in which any item (good, factor, service provider) crossing a border should be treated the same as that from a domestic provider. In other words, all border measures that inhibit movement across borders should be removed, and once across a border a foreign provider should be treated the same as a domestic provider with respect to other policy measures, such as taxes and regulations.

Lloyd and Smith also point out that some regulatory processes apply to both domestic and foreign providers but also inhibit the integration of markets. That is, these measures are not discriminatory but they limit transactions with foreign suppliers. Examples include systems of regulated standards applied to goods traded internationally or licensing systems applied to services.

In examining other dimensions of the goal of a single market they refer to the requirement that taxes be equal if the Law of One Price is to hold and discuss the contribution of exchange rate risk to price differences between markets. They note that while the ASEAN Concord II refers to a single market, at other places the text refers only to 'goods, services and investments (and) a freer flow of capital'. Their interpretation is that in ASEAN the notion of integration applies to FDI flows (but not full liberalisation of all capital flows) and they note the exclusion of any reference to integration of markets for labour. They support the focus on markets for goods, services, and direct capital, partly on the grounds that 'these markets are closely linked' (p.xii).

The commitment to integration is made by ASEAN members, and therefore refers at least in the first instance to the integration of markets among the membership. Lloyd and Smith also examine in detail the ways in which commitments to market integration can be documented at a regional level. However, in that case, a key question becomes the definition of the rules of origin, that is, the eligibility of various suppliers to access to the integrated markets. The definition of these rules and the extent to which costs are incurred in order to comply with them should also be assessed in this route to integration.

A further issue related to a regional approach to integration is that discrimination remains against suppliers that do not comply with the rules of origin. Lloyd and MacLaren (2003) review the literature on these effects of regional arrangements.

Lloyd and Smith provide a broad classification of groups of measures to be considered in the assessment of strategies for the move to single markets in the priority areas. The next steps are to identify relevant measures in each group and then to identify the significance of various measures. The significance of the measures provides a guide to priorities for action in terms of sectors and instruments.

The aim of this first phase of the current project is to follow the work of Lloyd and Smith (2004) to design a procedure for the collection of information about and the assessment of the significant of barriers to market integration. This work would be undertaken in the second phase of the current project.

This report will not provide the details of the relevant set of impediments in each of

the priority areas adopted by Leaders at the 10th ASEAN Summit where they signed a Framework Agreement to support implementation of the goal of integration.² It will discuss a process for producing that information with a focus on goods and services (that will include a discussion of impediments to investment). This report compiles details of existing inventories of policy and other measures that impede the establishment of a single market. It also reviews work on the use of survey methods to collect information on the significance of the measures.

Trade in Goods: Tariff Measures

The structure of each country's tariff schedule is extremely complicated, typically involving around ten thousand tariff items, with several different rates applying to particular imported products, sometimes depending on their country of origin. Thus, wide ranges of tariff rates may apply to similar as well as to different items and groups of items.

The extent of openness can summarised by a number of indicators. According to OECD (1996), there are a number of important conceptual issues related to the construction of summary tariff indicators. Notable among these are:

- 1. The appropriate tariff rate
- 2. The weights, if any, used for aggregation purposes
- 3. The appropriate indicators of dispersion in tariff rates

Deciding which rates should be used requires a clear distinction among the statutory (nominal) tariff rate, collected tariff rate, marginal tariff rate, and effective tariff rate. OECD (1996) concludes that the collected tariff rate (based on the ratio of customs duties divided by the landed value of imports) is not a reliable indicator of the potentially distorting effects of the tariff structure on domestic resource allocation since it averages the MFN and preferential rates, while the marginal tariff rate is the most appropriate indicator of the potential losses caused by duties. An alternative is the applied statutory rate excluding preferential rates and exemptions, namely 'the applied most-favoured nation (MFN) rate'. This is the most straightforward nominal tariff rate, the next best possibly being the average of the MFN and preferential tariffs.

It is important to report the preferential tariffs applied by each member (rates may vary between members because of the use of exclusion lists) and the extent of trade taking place at preferential rates (a recent paper by Baldwin (2006) reports rates of utilisation of less than 10%). These preferential rates are not the marginal rates (unless preferential sources of supply are used at the margin) but this information is important for the assessment of AFTA.

Three different weighting methods can be considered: simple (unweighted) arithmetic averages, import-weighted averages, and production-weighted averages. The first takes no account of the relative importance of various products. The second underestimates the degree of protection since it assigns a small weight to the highly protected products. By contrast, the third over-represents highly protected products, but it avoids the spurious movements often associated with the second method. As a compromise, OECD (1996) suggests the use of both simple (unweighted) and constant-import-share-weighted averages. The latter involve the composition/shares of overall OECD import values in a specified year rather than countries' own weights for each year.

Summary indicators are of some interest, for example, in monitoring progress in liberalisation. However, when the purpose is to design a work program to establish a single market and eliminate all distortions, then summary indicators are of less relevance. More

_

² The 11 priority sectors are (i) agro based products; (ii) air travel; (iii) automotives; (iv) e-ASEAN; (v) electronics; (vi) fisheries; (vii) healthcare; (viii) rubber-based products; (ix) textiles and apparel; (x) tourism; and (xi) wood-based products.

significant in that case is information on the actual tariff rates applied to the (important) products in regional trade.

Likewise, a dispersion index could be used to identify the likely extent of dead-weight losses associated with a country's tariff structure. The larger the dispersion in tariff rates applicable to various products, the greater the incentive for exporters and importers to reclassify products so that they are subject to lower tariffs. The most commonly used indicators of dispersion are the standard deviation (SD) and the coefficient of variation (CV). The SD is the *absolute* dispersion between items in a frequency distribution, while the CV measures *relative* dispersion by dividing the SD by the average tariff rates. OECD (1996) suggests that, from the resource allocation standpoint, the SD is a more appropriate indicator of potential economic distortion than the CV. A priority in the design of a work program on the establishment of a single market will be details of the tariff rates that are relatively high ('spike' or 'extreme' rates).

Some tariffs are not calculated as *ad valorem* rates, but in specific terms. Non-*ad valorem* rates should be converted to *ad valorem* terms, which require unit values of imports (or a substitute when those values are not available from trade data). The WTO discusses options for these calculations for agricultural products³ and non-agricultural products.⁴

As yet a consistent and comprehensive set of tariff indicators for ASEAN members in the priority sectors is not available. The OECD (1996, p.11) lists eleven indicators for such work:

- 1. The proportion of national tariff lines that are 'bound'
- 2. The proportion of tariff lines for which the tariff rate is zero
- 3. Non-ad valorem (namely, specific and compound/alternative) tariffs as a proportion of all tariffs
- 4. Tariff quotas as a proportion of all tariffs
- 5. The proportion of tariffs for which no ad valorem equivalent (AVE) exists
- 6. The simple average of bound MFN tariffs
- 7. The simple average of applied *ad valorem* MFN tariff rates
- 8. The import-weighted average MFN tariff rate (using constant OECD import weights)
- 9. The production-weighted average MFN tariff rate (based on each country's own gross production)
- 10. The number of domestic tariff 'spikes' as a proportion of tariff lines, where a domestic 'spike' is defined as a tariff rate that exceeds three times the national average for all products
- 11. The standard deviation (SD) for all tariff lines.

Indicator 1 measures the coverage of GATT-negotiated bound rates for particular product groups. Indicator 2 captures the proportion of tariff lines that are not subject to duty. Indicators 3 and 4, respectively, highlight the presence of relatively opaque non-ad valorem tariffs and tariff quotas. Indicator 5 shows the proportion of these two types of tariffs for which ad valorem equivalents (AVE) are not available. Indicator 6 shows the highest permissible level of nominal MFN tariff protection consistent with the rates bound under the GATT. By contrast, indicators 7, 8, and 9 reflect the actual nominal levels of MFN tariff protection.

³ Annex 1 at http://www.wto.org/english/tratop_e/markacc_e/markacc_draft_modal_e.htm

⁴ JOB(05)/166/Rev.1: see also Negotiating Group on Market Access – Incidence of Non-*Ad valorem* Tariffs in Members' Tariff Schedules and Possible Approaches to the Estimation of *Ad Valorem* Equivalents by the Secretariat – Revision, TN/MA/S/10/Rev.1, 18 July 2005.

Indicators 10 and 11 capture the domestic dispersion in applied MFN tariff rates across products. Preferential tariff rates and the proportion of trade occurring at the preferential rates can be added to this list.

Non-Tariff Measures

Non-tariff measures are the set of all measures other than tariffs that 'distort trade flows'. There is a distinction between the set of all non-tariff measures and the subset that affects welfare and that therefore deserve policy attention. Baldwin (1970), cited in Dee and Ferrantino (2005), defines a 'non-tariff distortion' as 'any measure (public or private) that causes internationally traded goods and services, or resources devoted to the production of these goods and services, to be allocated in such a way as to reduce potential real world income'.

This definition allows for the possibility that a case could be made for the use of some measures, which also have an effect on trade, in terms of their contribution to resolving a market failure. While it is unlikely that a trade-related measure is the best remedy to solve such problems, this argument may be applied.

This type of distinction between measures that affect trade and the subset that affect welfare is relevant in relation to technical barriers to trade, designed to reduce health risks for example. Maskus *et al.* (2000) review the methodological issues surrounding technical barriers to trade and McGuire *et al.* (2002) offer examples of policy conflicts related to NTMs. A specific discussion about NTMs affecting EU agro-food exports can be found in Walkenhorst (2004), and about the European car market in Goldberg and Verboven (2001).

Bora *et al.* (2002, p.3) propose a realistic assessment of the likelihood of some measures being removed. For example, it is unlikely that governments will remove permanent control on technical barriers to trade or on trade in arms, drugs, pornography, and so forth, although technical barriers to transactions in those sorts of products or services may become harmonised.

Generally, the focus is on measures that affect imports. However, recently a call has been made for more attention to measures that affect exports, including export taxes and restrictions (Kazeki, 2005a, 2005b). Removing the risk of the application of export restrictions will be an important complement to commitments in ASEAN to openness in food markets, including in the priority areas, as members respond to structural change and declines in food self-sufficiency.

Other commentators (including Lloyd) have stressed that 'subsidies' are more extensive than commonly realised. Examples are budget and financial measures that assist domestic producers, including through support for purchase of inputs or for research and development. The Australian Productivity Commission (2004, Appendix A) each year reviews the extent of these measures in Australia, and that work illustrates the argument about the frequency and scale of these sorts of measures.

According to Bacchetta and Bora (2005), the fact that trading nations in the WTO have tried for more than four decades to address NTMs can be taken as evidence of their desire to apply the principles of transparency and non-discrimination to these measures. This implies the importance of assessing NTMs. Studies of NTMs among Generalized System of Preferences (GSP)-covered products (Clark and Zarrilli, 2001) and United States imports of Caribbean Basin Economic Recovery Act (CBERA)-eligible products (Clark and Zarrilli, 1994) are also valuable.⁵

⁵ Under the GSP, most industrial nations extend tariff preferences to certain manufactured and semimanufactured articles exported from designated beneficiary developing countries, while retaining most-favoured-nation (MFN) duties on imports from non-preferred supply sources (Clark and Zarrilli,

The set of NTMs is very large and encompasses a significant range of measures both public and private (Dee and Ferrantino, 2005). There will be debate about whether some are justified. Some will apply only to foreign suppliers and some that affect foreigners will be a consequence of domestic regulation that also affects local firms. All may affect market integration, and where a case exists for some form of intervention, the question is whether the NTM is the best measure and whether it applies in a non-discriminatory manner.

The wide variety and complex nature of NTMs has led to the use of different systems of classification. The following sections provide information about existing classifications. Dee and Ferrantino (2005) is the main literature source on this issue.

a. Baldwin Classification

Baldwin (1970), cited in Dee and Ferrantino (2005), developed the first taxonomy of NTMs. This taxonomy provides no specific direct measures of the policy impact, it only specifies general classification of policies that impede the establishment of a single market. It includes:

- Quotas and restrictive state-trading policies
- Export subsidies and taxes
- Discriminatory government and private procurement policies
- Selective indirect taxes
- Selective domestic subsidies
- Restrictive customs procedure
- Anti-dumping regulations
- Restrictive administrative and technical regulations
- Restrictive business practises
- Controls over foreign investment
- Restrictive immigration policies
- Selective monetary controls and discriminatory exchange-rate policies

b. Laird and Vossenaar Classification

Laird and Vossenaar (1991) (also discussed by Dee and Ferrantino (2005)), developed a classification based on the objective or immediate impact of the measure. This includes five categories:

- 1. Measures to control the volume of imports
- 2. Measures to control the price of imported goods
- 3. Monitoring measures, including price and volume investigations and surveillance
- 4. Production and export measures
- Technical barriers

c. Deardorff and Stern Classification

Deardorff and Stern (1997) provide the most recent classification. They define an NTM by stylised characteristics:

- Reduction in the quantity of imports
- Increase in the price of imports

2001, p.284). CBERA has the central feature of customs duty-free access to the US market for a wide range of products from designated beneficiary countries for 12 years (Clark and Zarrilli, 1994, p.214)

- Change in the elasticity of demand for imports
- Variability of NTMs
- Uncertainty of NTMs
- Welfare costs of NTMs
- Resource costs of NTMs

They propose a classification system that has at its core price (other than tariffs) and quantity border measures. They classify a large variety of NTMs into five major categories:⁶

- Quantitative restrictions and similar specific limitations on imports or exports
- Non-tariff charges and related policies affecting imports
- Government participation in trade; restrictive practices; general policy
- Customs procedures and administrative practices
- Technical barriers to trade

d. UNCTAD Classification

The UNCTAD Coding System of Trade Control Measures defined over 100 measures. Although measures applied to exports and production were excluded, there has been no other comparable attempt at defining the same wide range of NTMs. The classifications are:

- Para-tariff measures custom surcharges, additional taxes and charges, decreed customs valuation
- Price control measures administrative pricing, voluntary export restraint, variable charges
- Finance measures advance payment requirements, regulation concerning terms of payment for imports, transfer delays and queuing
- Quantity control measures non-automatic licensing, quotas, prohibitions, export restraint arrangements, enterprise-specific restrictions
- Monopolistic measures a single channel for imports, compulsory national services
- Technical measures technical regulations, pre-shipment inspection, special customs formalities

Comparing the Deardorff and Stern and UNCTAD classifications, it is interesting to note that although two or three of the categories have similar labels in the two classifications (for example, quantity control measures and quantitative restrictions, or technical measures and technical barriers to trade), the measures that have been included under the same category in each topology are quite different (McGuire *et al.* 2002, p.10). This illustrates the difficulty in deciding how to deal with these measures, even for fairly obvious NTMs, such as quantitative measures. To solve this problem requires a clear definition of each NTM.

Ideally, work on movement to a single market would produce for each tariff item rates of assistance that included the combined effects of *ad valorem* tariffs, non-*ad valorem* tariffs, and non-tariff measures. The treatment of non-*ad valorem* tariffs was discussed above. In the case of non-tariff measures, there may be a tariff rate that has equivalent effects, but a large literature on 'equivalence' has shown that this situation may not apply in the presence of uncertainty, quality differences, retaliation, or imperfect competition. However, the more

⁶ See table 1 in Dee and Ferrantino (2005, p.23) for complete details of NTMs in each category.

important difficulties in the current project will be those related to measurement, even when it can be assumed that an equivalent rate does exist. Measurement problems are examined in later sections and because of those sorts of problems simpler measures such as frequency counts and import coverage measures are often proposed.

Tariff rate quotas are a special case. These are examined in a number of papers in the book edited by Ingco and Winters (2004). These papers show that for goods subject to a TRQ, the *ad valorem* equivalent may be the in-quota rate, the out-of-quota rate, or may lie between those two.

e. Work in ASEAN on NTMs

Major milestones in ASEAN work on NTMs (referred to as non-tariff barriers or NTBs) include

- the Preferential Agreement of 1997 that referred to the preferential relaxation of nontariff barriers
- a Memorandum of Understanding on the Standstill and Rollback on Non-Tariff Barriers of 1987: the focus was on NTBs on products that met the rules of origin in ASEAN – all NTBs not consistent with GATT would be subject to a 'unilateral rollback' and GATT-consistent measures would be removed preferentially after negotiation and later extended according to the MFN principle
- the CEPT Agreement of 1992 that called on members to remove all quantitative measures for products included in the CEPT and adopted a target of removing other NTBs.

After missing earlier deadlines, the High Level Task Force on ASEAN Economic Integration designed a new work program on NTBs that

- established an ASEAN database on NTBs by mid 2004
- adopted WTO Agreements on Technical Barriers to Trade, SPS, and Import Licensing Procedures by the end of 2004
- set clear criteria to identify measures that are regarded as barriers to trade by mid 2005
- designed a plan for the removal of these barriers, also by 2005.

The Hanoi Plan of Action had already put priority on customs harmonisation and standards and conformity assessment, and the Task Force suggested initiatives in those areas. Systems for gathering information on NTBs had also been established. Members were obliged to report new measures and also regularly submit lists of measures applied by them. Systems for consultation with ASEAN chambers of commerce and industry to identify relevant measures were also set up in 1996.

As a result of the most recent work program, ASEAN adopted a list of measures (Appendix 1 – see De Dios for detailed definitions) based on the UNCTAD classification (Appendix 2). The ASEAN list included priorities for removal in ASEAN work programs. The omissions in the ASEAN list should be highlighted – internal taxes and charges levied on imports, anti-dumping measures, restrictions on the allocation of foreign exchange, and automatic licensing.

The ASEAN Non-tariff Measures database is now available at http://www.aseansec.org/16355.htm. From this database, it is possible to identify the incidence of non-tariff measures by type of measures by tariff line. De Dios (2004) reports that non-automatic licensing is the most commonly employed measure, followed by technical regulations or prohibitions (though it is also pointed out that there may sometimes be an overlap between these categories).

De Dios also reports the incidence of NTMs for the priority goods sectors and concludes that the tariff lines with high NTM incidence are often components of the priority sectors, confirming the selection of those priorities. De Dios discusses principles for the design of the process of elimination of NTMs in the priority sectors, including assessment of the potential for non-transparent or discriminatory action, the lack of a scientific basis for the measure, and the existence of an alternative that achieves the objective with less distortion. De Dios notes, however, that the database does not include information on 'intent'.

SURVEY METHODS and the SIGNIFICANCE of NTMs

Measurements of trade barriers can be either direct or indirect. Direct measurements are obtained from explicit policy, while indirect measurements try to infer the existence of barriers using observed discrepancies between actual economic performance and what would be expected if trade were free (Deardorff and Stern, 2004).

Data on NTMs are limited, particularly in developing countries. It is even more difficult to obtain *consistent* information on NTMs. Even establishing lists of measures that can be used for quantification is burdensome and time-consuming. Varying methodologies to measure NTMs have been applied. These include frequency measures derived from the databases with data drawn from Trade Policy Reviews and empirical analyses based on surveys of exporters (OECD 2005a).

Bacchetta and Bora (2005) suggest three phases of work on NTMs: a desk phase, a field work phase, and a priority setting phase.

(i) Desk Phase

The main task in this phase is to identify NTM barriers. As the starting phase, this phase can also be named the negotiation phase. It occurs when the members (of an international or regional organisation) attempt to develop a taxonomy of NTMs that they wish to discipline. In the negotiation phase, exporters will list all the measures they face at and beyond the border in foreign markets, while the governments will then need to identify those among the measures listed that warrant some form of action (Bacchetta and Bora, 2005).

There are two methods to identify NTMs: using existing databases or conducting a survey to set up a new database. The first approach, called the inventory approach, is one of two approaches suggested by Bora *et al.* (2002) for summarising information on the presence of NTMs. The inventory approach allows estimates of the extent of trade covered by NTMs or their frequency of application in specific sectors or against individual countries or groups of countries (Bora *et al.*, 2002, p.5).

UNCTAD hosts the only database on NTMs for public use. The WTO has a database based on notification but it is limited compared to the UNCTAD data, which is collected from national sources. It is also constrained by infrequent or incomplete notification.

TRAINS can be used to derive measurements such as frequency (F) and import coverage (IC) ratios. These indicators serve to highlight not only protected products and sectors, but also types of NTBs employed.

The F ratio for a particular importing country typically indicates the proportion (or percentage) of national tariff lines that are affected by a particular NTB or by a specified group of NTBs, irrespective of whether the products affected are actually imported (OECD, 1996). Walkenhorst (2004) reports that the quantitative findings in his study (for OECD countries) using frequency ratios should be interpreted with care, as frequency ratios are sometimes a poor indicator of the economic and trade effects that result from NTMs. In addition, Linkins and Arce (2002, p.3) note that these measures may be subject to aggregation bias, may understate coverage for a particular industry, and may provide little or no information regarding the actual effect on import quantities, prices, or trade flows. McGuire *et al.* (2002, p.19) argue that the indicator gives a misleading impression of the distorting effects of NTMs, particularly as they appear not to be well correlated with estimated tariff equivalents of NTMs.

The IC ratio indicates the share (or percentage) of a country's own imports that is subject to a particular NTB or any one of a specified group of NTBs (OECD, 1996). This ratio

-

⁷ Both the terms 'desk phase' and 'negotiation phase' are adopted from Bacchetta and Bora (2005).

indicates the share of trade affected by a given measure, not the degree of restrictiveness of a given NTM and the specific effects of NTMs on prices, production, consumption, and import values (Clark and Zarrilli, 2001, p.286).

(ii) Field Work Phase

To obtain information for a new NTM database, a systematic survey could be conducted, as suggested by Lloyd and Smith (2004). Surveys are commonly used in developed countries, and some adjustment would be required to transplant those models to ASEAN and to collect information in a manner consistent with the NTM classification system.

A number of models of questionnaires are available. Appendix 3 includes one of the earlier questionnaires used in work on European integration. The World Bank's 'Doing Business' also provides a questionnaire on 'trading across borders'. The OECD has designed a questionnaire for use in a 'Business Survey of Obstacles to Trade in Goods', although a comparison with the UNCTAD classification indicates that most of the UNCTAD categories could not be identified in the OECD questionnaire.

Separate questionnaires may be required in ASEAN for each of the priority sectors; however some core questions will be common to all. In general, according to Dee and Ferrantino (2005) all barriers can be included in one of the following three categories: quantity control measures, finance measures, and price control measures. De Dios (2004) adds that technical measures are common to all classifications. Hence, the four 'core' categories to be included in the taxonomy are:

- 1. Quantity control measures
- 2. Finance measures
- 3. Price control measures
- 4. Technical measures

Fliess (2005) provides a review of a series of business surveys, including:

- 13 that report frequencies (EU (2000), Danish (1997), Swedish (2000), Finnish (2001), Australian (2000), NZ (2001), PBEC (1997), ABAC/APEC (2000), Alberta (2000), Brazilian (2001), Chilean (2000), ALADI (2001), Zimbabwean (1995)),
- 5 that use measures other than frequency (Moroccan (2001), ASEAN (1995), Argentinean (1999), Chinese/Japanese/Korean (2001), MENA (2000))
- 4 that identify but do not rank NTMs (Chinese Taipei (2001), Indian (1999), Brazilian (2000), COMESA (1999)).

The 1995 ASEAN survey refers to work by the ASEAN Secretariat that collected information from member country submissions, from the ASEAN chambers of commerce, and from GATT Trade Policy Reviews and the TRAINS database. Using the TRAINS classifications, it produced the following ranking of measures (ASEAN Secretariat, 1996):

- 1. customs surcharges
- 2. technical measures
- 3. product characteristic requirements

REPSF Project 04/011: Final Report

http://www.doingbusiness.org/Documents/DBSurvey/FullSurveys/New_Questionnaire_2006.pdf The Doing Business project also provides special update questionnaires on ports – http://rru.worldbank.org/Documents/DoingBusiness/Methodology/TradingAcrossBorders/General-Portsurvey.pdf – and logistics – http://rru.worldbank.org/Documents/DoingBusiness/Methodology/TradingAcrossBorders/Logisticssurvey.pdf

- 4. additional charges
- 5. single channel for imports
- 6. state trading administration
- 7. marketing requirements
- 8. technical regulations.

Fliess concludes that generally business people are more concerned about 'behind-the-border policy issues' than traditional NTMs that apply at the border and that 'perceived problems are often procedural or administrative' (OECD, 2005e). Allowance is made for the different coverage of measures in various surveys. Fliess also notes a number of issues in the application of surveys, including:

- sample size and selection of respondents
- biases induced, e.g., when respondents exaggerate their claims if they think the
 information will be used to design policy, or when respondents withhold information
 whose use would remove a privileged position that they now hold or that would make
 their business operations more difficult
- the difference between the frequency of use of a measure and its impact.

Bacchetta and Bora (2005) recommend that instead of focusing on the NTMs in the countries that will be studied, the focus should be on the NTMs faced by the *exporters* to that country. More specifically, Nerb (1988) recommends that the interviews should be directed to the managers in charge of the product lines and that monthly business survey results should be used to reduce any 'seasonal' effect on their answers. Even though a company may produce several product lines, the respondent manager should answer for only one product line. This is because of the variation in NTMs even between product lines in the same industry.

A partnership with related government institutions, chambers of commerce and industry, and other relevant industry bodies could also be built to conduct the survey. Some ASEAN member countries have already done surveys to identify existing NTMs, for example McCarty (1999) on Vietnam. The Indonesian Bureau of Statistics and Bank Indonesia conduct the Harmonized Business Tendency Survey (Damanik and Avenzora, 2003) that is designed to collect information about business activity, including employment, competition, volume of production etc. from large and medium enterprises in four main sectors, namely industry (mining and quarrying, manufacturing, water, electricity and gas), trade, construction, and other (hotel and restaurant, transportation and communication, finance and business services, and personal services). Questions about NTMs might be added to such a survey.

While circumstances vary between countries, a degree of uniformity in approach is desirable across countries. International organisations may add to countries' research capacity to measure NTMs. For instance, the WTO Secretariat along with the World Bank is currently engaged in such a project (Bacchetta and Bora, 2005).

The form of the questions may also affect the result. An interesting lesson from McCarty (1999) about a survey in Vietnam is that the initial approach to use a questionnaire based on closed questions was rejected as the business managers' prior knowledge about NTMs was limited. The preferred approach has therefore been to conduct a thorough search of legal documentation relating to NTMs, while also interviewing business people and officials to understand how NTMs operate in practice. The McCarty survey was therefore based on a series of open-ended, but structured, interviews.

Saqib and Taneja (2005) suggest running a non-random survey. The criteria of selection are based on firm size and foreign affiliation of firms. The latter means affiliation in terms of indicators such as joint venture status, use of trade marks, extent of foreign

ownership, or the extent of the direct supply of plant, material, or technology and training. They also suggest a preliminary survey to test the questionnaire.

(iii) Priorities for Action and Measurement of Price Effects

Deardorff and Stern, cited in McGuire *et al.* (2002, p.20), put forward some guiding principles on choosing priorities for action and on procedures for measuring NTMs:

- Measures of NTMs should be constructed to reflect equivalence to tariffs in terms of their effects on the domestic prices of the traded goods;
- ii. Only direct effects on domestic prices should be used to define tariff equivalence;
- iii. There is no single method that can be relied upon to measure the sizes of NTMs that may be present in all sectors of the economy;
- iv. There is no substitute for NTM-specific expertise;
- v. Greatest reliance should be placed, where possible, on measures that derive their information from market outcomes in preference to measures that seek to construct estimates of market outcomes from quantitative data;
- vi. There are many NTMs in practice for which high-quality measures are simply not available;
- vii. Given the uncertainty that surrounds the measurement of NTMs, it would be best to construct approximate confidence intervals upper and lower bounds that can be assumed to include the size of NTM being measured;
- viii. Estimates of NTMs should be done at the most disaggregated levels possible.

Ferrantino (2006, p.9) divides the methods of analysing the price impacts of NTMs into four groups – the 'handicraft' price gap method, price based econometric methods, quantity-based econometric methods, and simulation methods. Baldwin (1970), cited in Bora et al. (2002), identified the effects of NTMs in a cross-commodity regression for the United States, and Leamer (1974) used cross-country analysis for each commodity (cited in Bora et al. (2002)). Laird and Yeats (1990), Hufbauer and Schott (1992), and USITC (1989, 1990, and 1992) are other examples of recent studies, including a variety of models to study the effects of non-tariff measures. Gravity models are also used (Kalirajan and Findlay, 2004; Hausman et al, 2005). The MAcMap–HS6 database contains information on tariff rates and on ad valorem equivalents of NTMs: see Bouet et al. (2004).

The work of computing the price wedge may be easier for government officials than for academic economists since governments have access to customs invoices and routinely compile information on prices overseas for use in verifying customs declarations (Bora *et al.*, 2002, p.8).

Kee et al. (2006) have recently produced a set of measures of the impacts of NTMs for a large sample of economies. They estimate that the significance of determinants of trade flows include comparative advantage variables (factor endowments), 'gravity' variables, and policy variables. The presence of NTMs is reflected by dummy variables that are derived from the UNCTAD classification and from the TRAINS database. They then estimate tariff equivalents of the NTMs using import demand elasticities and compare the relative magnitudes of tariffs and NTMs. This work is done at a high level of disaggregation. The work of Kee et al. contains estimates of the significance of NTMs in sectors of interest, and in those cases where estimates are not available from their work for some ASEAN members, new estimates could be derived applying their model to sectors of interest.

A complementary method is to use the supply chain as a unifying analytical framework. Ferrantino (2006, p.38) suggests that the analysis can establish a metric by which seemingly disparate factors (such as international transportation costs, costs in ports,

and airports, tariffs, market power, NTM rents, and the process of wholesaling and retailing) can be compared to each other. Ferrantino argues that 'analyses which decompose the supply chain into its component parts may offer a new avenue for studying the relative importance of different policies which may affect trade' (p.27).

Anderson and van Wincoop (2004) suggest that the 'typical' cost increase along the supply chain from the factory to the retailer is of the order of 170%, which may be decomposed as follows: 21% transportation costs, 44% border-related trade barriers, and 55% retail and wholesale margins. The 44% may include tariffs, NTMs, and 'natural' barriers (such as different languages, information costs, and the cost of using different currencies). It is also important to include export and import activities as elements of the supply chain: see Walkenhorst (2004) for details of a survey concerning EU exporters.

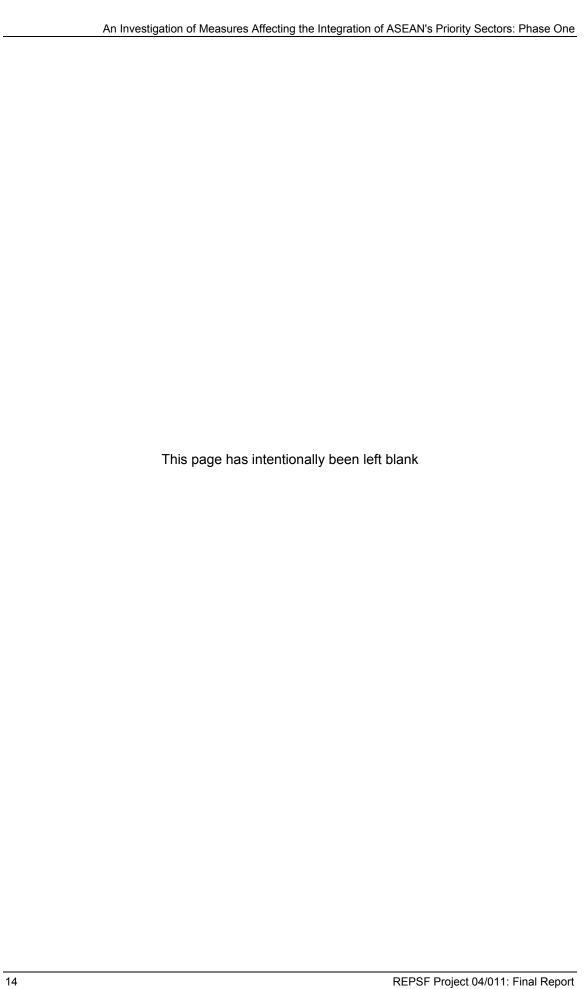
(iv) Links to Trade Facilitation

Trade facilitation covers all the steps that can be taken to smooth and facilitate the flow of trade (OECD, 2005c). A study of the survey on the costs to government of introducing and implementing trade facilitation measures in four countries – Chile, Latvia, Morocco, and Uganda – is found in Moise (2004). Other sources are OECD (2003a, 2003b, 2005b).

At some stage it may be necessary for ASEAN to simplify and harmonise customs formalities in respect of consignments for which immediate clearance is requested. A guideline is to be found in WCO (1994). Furthermore, it is also useful to study how port performance affects trade and welfare. Examples are work on Latin America in Londoňo-Kent and Kent (2003), on US–Mexico trucking costs in Fox *et al.* (2003), and on trade logistics costs in the Middle East and North Africa in Devlin and Yee (2005) and in USITC (2005).

Assessment of NTMs should also include consideration of these matters related to trade facilitation, many of which are related to policy choices in other sectors, services in particular.

⁹ The recently completed REPSF Project 04/002 on 'Harmonization and Integration of Customs Cargo Processing Policies and Practices in the ASEAN Region' is an input to ongoing efforts.



METHODS of MEASUREMENT of SERVICES BARRIERS

Services are a significant share of economic activity in all economies, so inefficiency in service delivery impedes overall economic performance. Trade barriers are an important source of inefficiency. They do not just restrict cross-border transactions. The most important barriers are regulations that operate behind the border. Many of these do not explicitly discriminate against foreign suppliers but also affect local service firms. Barriers to services trade potentially have much greater leverage on economic performance than do barriers to goods trade.

According to ISEAS (1985), there are essentially two types of trade barriers: border restrictions and investment restrictions. Effective policies to liberalise trade in services require a detailed knowledge of border and investment restrictions on individual service industries. Border restrictions limit the flow of services into the country, while investment restrictions affect foreign firms' competitive position relative to that of local firms.

Work on barriers to trade in services is reviewed by Dee (2005).¹⁰ One policy message is that services trade reform that encompasses non-discriminatory measures that impede indigenous service suppliers, not just those measures that explicitly discriminate against foreigners. If it does so, indigenous firms can also benefit from reform.

Earlier work on barriers to trade in services (e.g., Findlay and Warren, 2000) recognised that services are highly differentiated. Thus the measurement of services trade barriers could not assume that services are homogeneous. Nor is it appropriate to use the price comparisons methodology often used to measure non-tariff barriers in goods trade, since this assumes homogeneity across borders. Strictly speaking, it may not even be appropriate to talk about a 'tariff equivalent', since this concept (a) assumes that services are primarily traded cross-border, and (b) often also assumes that the domestic and foreign service are perfect substitutes.

Because services trade barriers operate behind the border, the research quantified the effects of services trade barriers on some behind-the-border measure of economic performance. In generic terms, econometric methods were used to estimate the effects of some measure of services trade barriers (*TB*) on some measure of economic performance (*Y*) in a market, controlling for all the other factors (*Z*) that affect economic performance in that market. The estimated model was then used to construct the value *Y'* that would obtain in that market if there were no non-tariff barriers (normally, if *TB* took a zero value). The actual models varied from one sector to the other, but were typically drawn from the literature on structure, conduct, and performance for the sector in question.

The methodology required a quantitative measure of services trade barriers. Qualitative information about regulatory restrictions was converted into a quantitative index (or indexes), using *a priori* judgements about the relative restrictiveness of different barriers. However, it was sometimes possible to use the econometric stage to test the weights that were assigned *a priori* to different categories of restrictions in the first stage, essentially by reestimating them. This was done by entering the index scores for the different categories of restrictions separately into the estimating equation.

Often this approach was precluded by one of two econometric problems – multicollinearity, or lack of in-sample variation in one or more of the restrictiveness index components. More recently, the OECD (eg Gonenc and Nicoletti, 2000) has used factor analysis in an attempt to overcome these problems by identifying a set of orthogonal 'factors' that explain most of the variation in the original data on regulatory restrictions. However, high cross-country variation in restrictions may have little or no relationship with relative economic importance. A better solution is to obtain larger data samples with more in-sample variation.

¹⁰ This section was prepared using material provided by Philippa Dee, and was derived from Dee (2005) and other sources. http://apseg.anu.edu.au/pdf/Combined report.pdf

More recent work has examined the links between services trade barriers and 'behind-the-border' domestic regulation (e.g., Sidorenko and Findlay, 2003). Because services is an area where market failures can occur, services trade liberalisation may not deliver the anticipated benefits if it is not supported by the appropriate domestic regulatory regimes. This work explored in more detail the nature of the best-practice regulatory regimes in services, and their relationship with services trade barriers.

A key methodological issue was how to distinguish between regulatory measures that were protective and those that were designed to meet legitimate economic or social policy objectives (as noted above, the same issues arise in the application of some technical barriers to trade in goods). One method was to make a decision *a priori* about which policy measures were designed to meet legitimate economic or social policy objectives, and to exclude these from the analysis of services trade barriers at the outset. For example, licensing *per se* was not necessarily treated as a restriction, but only when the licensing was not automatic or the qualification criteria were judged to be unduly restrictive. Similarly, the analysis of trade barriers in air passenger transport excluded those policy measures designed to ensure the safety of passengers, and the analysis of electricity generation excluded those technical regulations designed to ensure the integrity of the transmission network.

Another approach was to treat regulation on a continuum, and to consider whether the current level of regulation was 'too little' or 'too much'. Conceptually, this was accomplished by allowing for a non-linear relationship between regulation and performance, and then identifying at what point the degree of regulation had the least adverse incidental effect on economic performance. This approach was used to identify the optimal regulatory regime in electricity generation, although there the regulatory choices were binary rather than continuous. It was also used recently by other researchers to identify the optimal level of mandatory port servicing (Clark *et al.*, 2004).

There have been two recent critiques of the services trade barrier measurement methodology, by Whalley (2004) and Deardorff and Stern (2005). Whalley (2004) makes the following specific criticisms of services trade barrier measurement.

First, he notes that with multiple restraints on trade it is not clear which restrictions are binding and which are not. This argues for continuing efforts to separate out the different dimensions of trade barriers and to enter them separately into the econometric models of sectoral performance.

Second, he notes that the marginal effects of different restrictions on trade will typically differ. This also argues for continuing to separate out the different restrictions in econometric work.

Third, he notes that there may be country discrimination in the application of barriers, even though both *de jure* and *de facto* discrimination are breaches of national treatment under the GATS. The literature has so far dealt with this by explicitly identifying both discriminatory and non-discriminatory measures, using policy information sources that go well beyond GATS schedules. Work has also begun on documenting the content of services trade commitments in regional trading arrangements, so as to identify deviations from most-favoured-nation treatment.

Whalley states that quantity-based measures are 'typically based on model-generated residuals given by observations relative to econometric model predictions' (p.1239). However, Francois and Hoekman (1999) is the only known study to use this approach.

Finally, Whalley presumes that international price comparisons are the appropriate way to generate price-based measures of barriers to services trade, but notes that 'price differences across countries for services need not be related to barriers, even if they could be measured' (p.1239). However, the highly differentiated nature of services makes direct international price comparisons an inappropriate tool. The research to date has not used this approach, but has instead undertaken behind-the-border studies of market structure, conduct,

and performance to generate its price or cost impacts, controlling for a range of other factors that affect prices or costs.

Deardorff and Stern (2005) assert that the appropriate way to model services trade barriers is as a tariff equivalent. All the examples they give to demonstrate that a tariff equivalent is an appropriate concept are examples of discriminatory trade barriers. This pays insufficient attention to the critical importance of non-discriminatory trade barriers in services trade.

In discussing the issue of assigning weights in a restrictiveness index by judgement or by factor analysis, they state that '[Judgement] may well be the best approach if the investigator really is knowledgeable, as in the case when an index is being constructed for a specific narrowly defined industry. An alternative ... is to apply factor analysis to the data ...This is a purely statistical technique that is not, in our view, necessarily an improvement on the use of judgement weights.' (p.569)

Deardorff and Stern provide guiding principles for measuring barriers to services trade. They note first that no single methodology is sufficient for documenting and measuring barriers to trade in services. Instead, investigators need to draw upon all available information, including both direct observation of particular barriers and indirect inference of barriers using data on prices and quantities.

Examples of subsequent research that has adopted the above methodology for measuring the direct effects of barriers to services trade include Barth *et al.* (2004), Fink *et al.* (2001), Clark *et al.* (2004), and OECD (2005).

In financial services, Gordon and Chapman (2003) summarise restrictions on this area. They divide the details into four 'modes of supply', namely: Mode 1, cross-border supply; Mode 2, consumption abroad; Mode 3, commercial presence; and Mode 4, presence of natural persons. In shipping services, which is one of the most important services related to trade, tariff regulations are well documented in most countries. PDP Australia Pty Ltd (2005) report the shipping services in ASEAN countries. Further investigation can be done by legal documentation search through government institutions.

Examples of research that has used the estimates of barriers to trade in services to evaluate the economy-wide effects of services trade liberalisation include Dee and Hanslow (2001), Dee *et al.* (2003), and Dee (2005).

In many respects, this research is unsatisfactory. To date, the single biggest determinant of the projected gains from services trade liberalisation (and the policy priorities that flow from that) is whether the trade barriers are modelled as affecting mark-ups or affecting real resource costs. This 'treatment' effect often dominates the estimated 'height' of the trade barrier, and accounts for some of the variation in modelling outcomes observed by Whalley (2004). Liberalisation of rent-creating barriers yields 'triangle gains' in producer and consumer surplus associated with improvements in allocative efficiency, but also has redistributive effects associated with the elimination of rents to incumbents. By contrast, liberalisation of cost-escalating barriers is equivalent to a productivity improvement (saving in real resources), and yields 'roughly rectangle gains' associated with a downward shift in supply curves. These typically exceed triangle gains by a significant margin.

Whether barriers create rents or add to resource costs is severely under researched. In some cases, the empirical evidence is suggestive, but not conclusive, because only one performance measure has been used. In other cases, a price impact is estimated, and then it is simply asserted whether the effect operates through price—cost margins or whether it operates through costs.

To establish this properly requires the use of more than one measure of economic performance. Specifically, it requires estimating both a profit function and a cost function, and determining the effects of trade barriers on both measures of performance. Only then can it be teased out whether the effects of trade barriers are operating through price—cost margins or through marginal costs. A second advantage to estimating profit and cost functions is that

both are structural, and correct for output quantities. This would help to overcome the critique outlined earlier about the reduced form nature of most of the work to date.

This work is likely to be outside the scope of the second phase of the current project, where the suggestion (as presented in more detail below) is to concentrate on the collection of data on policy measures and where possible complete assessments of the likely significance of particular measures, following the procedures reviewed by Dee (2005). Also guidance to further work is available in Langhammer's (2005) study of services market integration in the EU in which, using the Hoekman (1996) scheme for rating GATS commitments, he compares market integration in goods with that in services (concluding that the EU is not even a free-trade area in services).

Investment

Guidance on the assessment of barriers to direct foreign investment is available in the work on barriers to trade and investment in services, which includes treatment of the third mode of supply of services (via offshore establishment). A similar index methodology can be applied to foreign investment in the goods sector.

Golub (2003) presents a specific inventory system for direct foreign investment restrictions that refers to

- restrictions on the extent of foreign ownership
- national treatment provisions
- screening and approval processes
- rules on board and management composition
- performance requirements.

This list could also be adapted to ASEAN economies, or combined and checked against lists of measures developed in studies of the services sectors. It could also be extended to include foreign exchange restrictions on the remittance of profits and on the movement of business personnel. FDI incentives should also be included (noting that the priority is the treatment of measures affecting intra-ASEAN capital flows).

Next Steps – Proposal for Phase 2

Based on this review and the definition of the priority sectors, a suggested plan of work in Phase 2 of this work is shown in Annex 1. This includes the compilation of material from existing databases for the priority sectors, followed by a series of sectoral projects as well as a wide-ranging business sector survey of impediments. The work is designed to identify impediments to integration at the border and behind the border, in markets for goods and services, and with respect to direct capital flows.

The results of these components are to be compiled into a final report with suggestions for priority actions in all (or a subset) of the priority sectors.

Annex 1: Proposed Research Outputs

A. Overview Report

A number of existing studies have examined impediments to market integration among ASEAN members. The purpose of this part is to compile this material where it exists for the priority sectors in the member economies, and to update that information where existing databases permit (e.g., tariff data and NTM frequency and impact data). The report will also identify and summarise missing data by sector and by member. The work will be introduced by an update of earlier work on patterns of trade in the key products and services in the region. This work will be presented in a way that will offer valuable insights into the design and implications of the emerging regional architecture.

Activities include:

- a. Review of regional trade data in the key (goods) sectors
 - Draw on earlier REPSF project report 03/006E
 - Update material in that report where feasible
 - Review the scope to present this material in the context of East Asian/CER trade patterns
- b. Review available tariff rate data
 - Report tariff data in forms of widely used indicators, such as means, peaks, etc. (available for all members from, e.g., WITS)
 - Take account of the impact of FTAs, including with non-members, and including implications for intra-regional trade flow
- c. Review estimates of NTM frequency and impact
 - Estimates are available from UNCTAD and the ASEAN Secretariat
 - The World Bank has recently produced reports on the significance of NTMs by country and sector, so extract relevant material for priority sectors that is available for a subset of members
- d. Review estimates of services impediments in the key sectors
 - Extract from a recently released 'Compendium of impediments to services trade and investment'
 - Review impact of FTAs on patterns of trade and investment

B. Sectoral Reports

The project is designed to check existing datasets, fill gaps (e.g., measures not referred to, economies not included), and make progress on work designed to establish the significance of various measures, in order to prioritise actions for further policy attention. An important part of the work will be to add to existing databases by the collection of data within the framework of the supply chain for a sample of products or services within the aggregate, and to use that analysis to help identify priorities for policy action. This work also contributes to the design of data collection templates to be used in larger-number survey work, and this part of the project should also incorporate the results of that survey work.

Compared to existing work, e.g., the ASEAN Non-tariff Measures database at http://www.aseansec.org/16355.htm, this work will add value through

reviewing categories of existing reported measures checking detail, further commentary on 'measures vs. barriers' checking for missing measures/barriers adding to the ability to comment on significance

adding to the capacity to maintain and update presenting suggestions of priorities for cooperative action

Activities include (per sector):

- a. Develop sector-specific list of measures & construct the supply/value chain model for a sample of products/services within the priority aggregate
 - compile data available from existing databases, e.g., ASEAN Secretariat, UNCTAD
 - includes specification of the scope of the sectoral definition, which in some cases may include a combination of goods and services
- b. Desk review of policy measures in this sector
 - Work off existing templates such as OECD and EU
 - Check against the available classifications of NTMs, e.g., UNCTAD
 - Country research in those members not already included in standard databases
- c. Redesign the templates for collection of policy information for the sector based on the results of parts a. and b.
- d. Conduct supply chain analysis via fieldwork visits
 - Track progressive price increases following the supply/value chain for a sample of products/services within the priority aggregate
 - Identify the impediments due to the price/quality of complementary services, e.g., transport
- e. Take in and comment on the results of the region-wide business survey of obstacles to trade.

C. Region-wide Business Survey of Obstacles to Trade

Copies of questionnaires derived from the data templates will be delivered to businesses with interests in the key sector. The main focus will be non-tariff measures. Care will be taken to include 'behind-the-border' measures, including examples of government processes or systems that may not be captured by the standard classifications of NTMs (as suggested by desk studies and field work). Researchers will design the data templates: the survey consultants will be asked to convert those templates into questionnaires.

D. Final Report on Findings and Recommendations

Based on a synthesis of the results from Inventory Method, Supply Chain Analysis, and Business Survey, the final report will provide (a) a summary of tariffs and non-tariff measures by country and by sector; (b) a discussion of the significance of the measures (including by price effects where available) of the measures to indicate gains from the elimination of the barrier; (c) identification of the top three measures (by country, by sector) for removal; and (d) a discussion of the implications of the similarity or dissimilarity in priorities for action.

E. Workshops

It is envisaged that two workshops will be convened at the initial stage and the midpoint with approximately 15 participants at each (one country expert and lead consultants, as well as participants from the survey consultant and sectoral experts). The purpose of the initial workshop is to explain the scope of the work, agree on the timetable, and complete a first discussion of the data templates. In addition, briefings will be provided by the sectoral experts on the likely range of key issues in market integration. The mid-term workshop will be held before the survey is completed in order to confirm the data templates for the priority sectors to be included and confirm the survey method, as well as to hear reports of work to date. [Comments on the final report will be collected via email communication.]

BIBLIOGRAPHY

- Anderson, James and Eric van Wincoop, 2004, 'Trade Costs', *Journal of Economic Literature*, 42(3), pp.691–751.
- APEC (Asia Pacific Economic Cooperation), 1998, Survey Results on the Use of Economic Instruments in APEC Economies, Singapore.
- ASEAN Secretariat, 1996, 'Non-tariff barriers', *AFTA Reader Volume 3*, September, ASEAN Secretariat.
- Bacchetta, Marc and Bijit Bora, 2005, *Quantification of NTMs in the WTO Context*, Presented at the UNCTAD Expert Meeting on Methodologies, Classifications, Quantification and Development Impacts on Non-Tariff Barriers, UNCTAD, Geneva.
- Baldwin, Robert, 1970, 'Determinants of the Commodity Structure of US Trade', *American Economic Review*, 61 ,pp.126–46.
- Baldwin, Richard, 2006, 'Managing the Noodle Bowl: The fragility of East Asian Regionalism', CEPR, forthcoming.
- Barth, James R., Gerard Caprio, Jr., and Ross Levine, 2004, 'Bank Regulation and Supervision: What Works Best?', *Journal of Financial Intermediation*, 13, pp.205–48.
- Berger, A., J.D. Cummins, and M. Weiss, 1997, 'The Coexistence of Multiple Distribution Systems for Financial Services: The Case of Property Liability Insurance', *The Journal of Business*, 70(4), pp.515–46.
- Bora, Bijit, Aki Kuwahara, and Sam Laird, 2002, *Quantification of Non-Tariff Measures*, Policy Issues in International Trade and Commodities Study Series No.18, UNCTAD.
- Bouet, A., Y. Decreux, L. Fontagne, S. Jean, and D. Laborde (2004), *A Consistent ad Valorem Equivalent Measure of Applied Protection across the World: MAcMap-HS6 Database*, CEPII Working Papers, CEPII Research Centre.
- CIES (Centre for International Economic Studies), 2005, *An Investigation into the Measures Affecting the Integration of ASEAN's Priority Sectors (Phase 1)*, REPSF Project No.04-011. University of Adelaide.
- Clark, Don P, 1992, 'Recent Changes in Non-Tariff Measure Use by Industrial Nations', *International Trade Journal*. 6(3), pp.311–22.
- Clark, Don P. and Simonetta Zarrilli, 1994, 'Non-Tariff Measures and United States Import of CBERA-Eligible Products', *Journal of Development Studies*/ 31, pp.214–24.
- Clark, Don P. and Simonetta Zarrilli, 2001, 'Non-Tariff Measures and Industrial Nation Imports of GSP-Covered Products', *Southern Economic Journal*, 59, pp.284–93.
- Clark, X., D. Dollar, and A. Micco, 2004, 'Port Efficiency, Maritime Transport Costs, and Bilateral Trade', *Journal of Development Economics*, 75, pp.417–50.
- Damanik, Maurids H. and Ahmad Avenzora, 2003, *Harmonization of Business Tendency Survey in Indonesia: Progress, Current Analysis and Survey Results*, http://www.unescap.org/stat/meet/cli_bts/_cli_bts__indonesia.pdf.
- De Dios, Loreli C., 2004, Issues and Options for the Work Program to Eliminate Non-Tariff Barriers in AFTA, ASEAN–EU Programme for Regional Integration Support Project 04/07.
- Deardorff, Alan V. and Robert M. Stern, 1997, *Measurement of Non-Tariff Barriers*, http://www.oecd.org/dataoecd/34/3/1863859.pdf
- Deardorff, Alan V. and Robert M. Stern, 2004, *Module 2: Empirical Analysis of Barriers to International Services Transactions and the Consequences of Liberalization*, University of Michigan http://www.fordschool.umich.edu/research/rsie/workingpapers/Papers501-

- 525/r505.pdf
- Deardorff, Alan V. and Robert M. Stern, 2005, 'Empirical Analysis of Barriers to International Services Transactions and the Consequences of Liberalization', in Philippa Dee and Michael Ferrantino (eds), *Quantitative Methods for Assessing the Effects of Non-Tariff Measures and Trade Facilitation*, World Scientific, Singapore, pp.549–609.
- Dee, Philippa, 2005, A Compendium of Barriers to Services Trade, prepared for the World Bank.
- Dee, Philippa and K. Hanslow, 2001, 'Multilateral Liberalisation of Services Trade', in Robert M. Stern (ed.), *Services in the International Economy*, University of Michigan Press, Ann Arbor, pp.117–39.
- Dee, Philippa, K. Hanslow, and T. Phamduc, 2003, 'Measuring the Cost of Barriers to Trade in Services', in T. Ito and A. Krueger (eds), *Services Trade in the Asia–Pacific Region*, NBER-East Asia Seminar on Economics, Volume 11, University of Chicago Press, Chicago, pp.11–43.
- Dee, Philippa and Michael Ferrantino (eds), 2005, Quantitative Methods for Assessing the Effects of Non-Tariff Measures and Trade Facilitation, World Scientific, Singapore.
- Devlin, Julia and Peter Yee, 2005, 'Trade Logistics in Developing Countries: The Case of the Middle East and North Africa', *The World Economy*, 28(3), pp.435–56.
- Ethier, W. and H. Horn, 1991, 'Services in International Trade', in E. Helpman and A. Razin (eds), *International Trade and Trade Policy*, MIT Press, Cambridge MA, pp.223–44.
- Fabella, Raul, 2002, *Monetary Cooperation in East Asia: A Survey*, ERD Working Paper Series No.13, Economics and Research Department, Asian Development Bank. www.adb.org/ Documents/ ERD/ Working_Papers/ wp013.pdf
- Ferrantino, Michael J., 2006, *Quantifying the Trade and Economic Effects of Non-Tariff Measures*, OECD Trade Policy Working Paper No.28. http://www.oecd.org/trade
- Fink, C., A. Mattoo, and C. Neagu, 2001, *Trade in International Maritime Services: How Much Does Policy Matter?*, Working Paper No. 2522, World Bank, Washington DC.
- Fliess, Barbara, 2005, 'Overview of Non-Tariff Barriers: Findings from Existing Business Surveys', in *Looking Beyond Tariffs: The Role of Non-Tariff Barriers in World Trade*, OECD Trade Policy Studies, OECD Paris.
- Forsyth, Peter, John King, Cherry Lyn Rodolfo, and Keith Trace, 2004, *Preparing ASEAN for Open Sky*, REPSF Project 02/008.
- Fox, Alan K., Joseph F. Francois, and Pilar Londoňo-Kent, 2003, *Measuring Border Crossing Costs and Their Impact on Trade Flows: The United States–Mexican Trucking Case*. OECD Working Paper. Available at http://www-personal.umich.edu/~alanfox/gtap/bcc/MeasuringBCC.pdf
- Francois, J. and B. Hoekman, 1999, 'Market Access in the Service Sectors', Tinbergen Institute, manuscript, cited in B. Hoekman 2000, 'The Next Round of Services Negotiations: Identifying Priorities and Options', *Federal Reserve Bank of St Louis Review*, 82(4), pp.31–47.
- Goldberg, Pinelopi Koujianou and Frank Verboven, 2001, *Market Integration and Convergence to the Law of One Price: Evidence from the European Car Market*, NBER Working Paper 8402.
- Golub, S, 2003, *Measures of Restrictions on Inward Foreign Investment for OECD Countries*, OECD Economics Department Working Paper No. 357.
- Gonenc, Ralf and Giuseppe Nicoletti, 2000, Regulation, market structure and performance in air passenger transportation OECD Economics Department Working Paper, August 2000

- Gordon, Jenny and Ross Chapman, 2003, *Liberalization of Financial Services in the ASEAN Region*, REPSF 02/006.
- Grubel, Herbert G., 1989, Liberalization of Trade in Services: A Taxonomy and Discussion of Issues, ISEAS, Singapore.
- Hausman, Warren, Hau L. Lee and Uma Subramanian, 2005, *Global Logistics Indicators, Supply Chain Metrics and Bilateral Patterns*, World Bank Policy Research Working Paper 3773.
- Hoekman, B. 1996, 'Assessing the General Agreement on Trade in Services'. In W. Martin and L.A. Winters (eds) *The Uruguay Round and the Developing Countries*, Cambridge
- University Press, Cambridge.
- Hufbauer, Gary C. and Jeffrey Schott, 1992, *North American Free Trade: Issues and Recommendations*, Institute for International Economics, Washington DC.
- Hummels, David, 2001, *Time as a Trade Barrier*, Global Trade Analysis Project Working Paper No.17, Purdue University.
- Imada, Pearl, Manuel Montes, and Seiji Naya, 1991, *A Free Trade Area: Implications for ASEAN*, ISEAS Current Economic Affairs Series, Singapore.
- Ingco, Melinda D. and L.Alan Winters (eds), 2004, *Agriculture and the New Trade Agenda:*Creating a Global Trading Environment for Development, Cambridge University Press, Cambridge...
- ISEAS (Institute of Southeast Asian Studies), 1985, ASEAN-EEC Trade in Services: An Overview, Singapore.
- Jayant, Menon, 1996, Adjusting Towards AFTA: The Dynamics of Trade in ASEAN, ISEAS, Singapore.
- Kalirajan, Kaliappa and Christopher Findlay, 2004, *Estimating Potential Trade using Gravity Models: A Suggested Methodology*, Asia Pacific School of Economics and Government, Australia National University.
- Kazeki, Jun, 2005a, 'Export Duties', in *Looking Beyond Tariffs: The Role of Non-Tariff Barriers in World Trade*, OECD Trade Policy Studies, OECD Paris.
- Kazeki, Jun, 2005b, 'Export Restrictions', in *Looking Beyond Tariffs: The Role of Non-Tariff Barriers in World Trade*, OECD Trade Policy Studies, OECD Paris.
- Kee, H.L., A. Nicita, and M. Olarreaga, 2006, *Estimating Trade Restrictiveness Indices*, World Bank Policy Research Working Paper No. 3840, February.
- Laird, Sam and Alexander Yeats, 1990, *Quantitative Methods for Trade Barrier Analysis*, Macmillan, London and NUUP, New York.
- Laird, Sam and René Vossenaar, 1991, 'Porqué nos preocupan las barerasno arancelarias?' *Informacion Comercial Espaňola*, Special Issue on Non-Tariff Barriers, November, pp.31–54.
- Langhammer, R. 2005, 'The EU Offer of Service Trade Liberalization in the Doha Round: Evidence of a Not-yet-perfect Customs Union', *Journal of Common Market Studies*, 43, 311–25.
- Leamer, Edward, 1974, 'The Commodity Composition of International Trade: An Empirical Analysis', *Oxford Economic Papers*, 26(3), pp.350–374.
- Linkins, Linda and Hugh M. Arce, 2002, *Estimating Tariff Equivalents of Non-Tariff Barriers*, US International Trade Commission Working Paper No.94–06–A(r).
- Lloyd, Peter and Don MacLaren, 2003, 'The case for free trade and the role of RTAs'. Paper presented at the Seminar on Regionalism and the WTO, Geneva, 14 November.
- Lloyd, Peter and Penny Smith, 2004, Global Economic Challenges to ASEAN Integration and

- Competitiveness: A Prospective Look, REPSF Project 03/006a.
- Londoňo-Kent, Maria del Pilar and Paul E. Kent, 2003, *A Tale of Two Ports: The Cost of Inefficiency*, Research Report, The World Bank.
- Maskus, Keith E., John S. Wilson, and Tsunehiro Otsuki, 2000, *Quantifying the Impact of Technical Barriers to Trade: A Framework Analysis*, Policy Research Working Paper Series 2512, The World Bank.
- McCarty, Adam, 1999, Vietnam's Integration with ASEAN: Survey on Non-Tariff Measures Affecting Trade, http://www.undp.org.vn/projects/ vie95015/inter/ntb.rtf
- McGuire, Greg, Robert Schollay, and Sherry Stephenson, 2002, APEC and Non-Tariff Measures, unpublished draft
- Moise, Evdokia, 2004, *The Cost of Introducing and Implementing Trade Facilitation Measures: Interim Report*, OECD Trade Policy Working Paper No.8.
- Nerb, Gernot, 1988, *The Completion of the Internal Market: A Survey of European Industry's Perception of the Likely Effects*, Commission of the European Communities.
- OECD (Organisation for Economic Co-operation and Development), 1996, *Indicators of Tariff and Non-Tariff Trade Barriers*, France.
- OECD (Organisation for Economic Co-operation and Development), 2003a, *Quantitative Assessment of the Benefits of Trade Facilitation*, TD/TC/WP(2003)31/FINAL.
- OECD (Organisation for Economic Co-operation and Development), 2003b, *Trade Facilitation:* The Benefits of Simpler, More Transparency Border Procedures, OECD Policy Brief August 2003.
- OECD (Organisation for Economic Co-operation and Development), 2005a, *Analysis of Non-Tariff Barriers of Concern to Developing Countries*, TD/TC/WP(2004)47/REV1, Working Party of the Trade Committee.
- OECD (Organisation for Economic Co-operation and Development), 2005b, *The Economic Impact of Trade Facilitation*, OECD Trade Policy Working Paper No.21.
- OECD (Organisation for Economic Co-operation and Development), 2005c, *The Costs and Benefits of Trade Facilitation*, OECD Policy Brief October 2005.
- OECD (Organisation for Economic Co-operation and Development) 2005d, 'Modal Estimates of Services Barriers', TD/TC/WP(2005)36, OECD, Paris.
- OECD (Organisation for Economic Co-operation and Development), 2005e, 'Executive Summary', in *Looking Beyond Tariffs: The Role of Non-Tariff Barriers in World Trade*, OECD Trade Policy Studies, OECD Paris.
- PDP Australia Pty Ltd and Meyrick and Associates, 2005, *Promoting Efficient and Competitive Intra-ASEAN Shipping Services*, Volume 2: Final Country Report REPSF Project 04/001.
- Productivity Commission (2004), *Trade and Assistance Review 2003–4*, Productivity Commission, Melbourne.
- Sidorenko, A. and Findlay, C. 2003, *Regulation and Market Access*, Asia Pacific Press, Canberra.
- Saqib, Mohammed and Nisha Taneja, 2005, Non-Tariff Barriers and India's Exports: The Case of ASEAN and Sri Lanka, Working paper No.165, Indian Council for Research on International Economic Relations, www.icrier.org/wp165.pdf. UNCTC (United Nations Commission on Transnational Corporations), 1993, From the Common Market to EC92, United Nations, New York.
- USITC (United States International Trade Commission), 1989, Economy-wide Modelling of the Economic Implications of a FTA with Mexico and a NAFTA with Canada and Mexico,

- Investigation No. 332–317, USITC Publication 2516.
- USITC (United States International Trade Commission), 1989, *The Economic Effects of Significant U.S. Import Restraints, Phase I: Manufacturing*, Investigation No. 332–262, USITC Publication 2222.
- USITC (United States International Trade Commission), 1989, *The Economic Effects of Significant U.S. Import Restraints, Phase II: Agricultural Product and Natural Resources*, Investigation No. 332–262, USITC Publication 2314.
- USITC (United States International Trade Commission), 2005, Logistic Services: An Overview of the Global Market and Potential Effects of Removing Trade Impediments, Investigation No. 332–463, USITC Publication 3770.
- Walkenhorst, Peter, 2004, 'EU Exporters Concerns about Non-Tariff Measures', *Applied Economic Letters*, 11, pp.939–44.
- WCO (World Customs Organization), 1994, Guidelines Which May Be Applied to Simplify and Harmonize Customs Formalities in Respect of Consignments for which Immediate Clearance Is Requested, Brussels.
- Whalley, J., 2004, 'Assessing the benefits to developing countries of liberalisation in services trade', *World Economy*, 27(8), pp.1123–53.

Appendix 1: ASEAN NTM Classification

Type of NTM

Para-Tariff Measures

Customs Surcharges (2100)

Additional Charges (2200)

Decreed Customs Valuation (2400)

Price Control Measures

Administrative price fixing of import prices (3100)

Voluntary export price restraint (3200)

Variable charges (3300)

Finance Measures

Advance Payment Requirements (4100)

Regulations concerning terms of payment for imports (4500)

Transfer delays (4600)

Automatic Licensing Measures

Automatic license (5000)

Import Monitoring (5200)

Quantity Control Measures

Non-automatic licensing (6100)

Quotas (6200)

Import Prohibitions (6300)

Export restraint arrangement (6600)

Enterprise specific restrictions (6700)

Monopolistic Measures

Single channel for imports (7100)

Compulsory national services (7200)

Technical Measures

Technical Regulations (8100)

Pre-shipment inspection (8200)

Special custom formalities (8300)

Sources: De Dios (2004, pp.55-60)

Appendix 2: UNCTAD coding system of trade control measures

1000 TARIFF MEASURES

- 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 sub-regional agreements
- 1930 Bilateral agreements

2000 PARA-TARIFF MEASURES

- 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 ANTI-DUMPING MEASURES
- 3410 Anti-dumping investigations
- 3420 Anti-dumping 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 IMPORTS
- 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
- 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
- 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
- 6360 Prohibition on the basis of origin (embargo)
- 6370 Prohibition for sensitive product categories
- 6390 Prohibitions n.e.s.
- 6600 EXPORT RESTRAINT ARRANGEMENTS
- 6610 Voluntary export restraint arrangements
- 6620 Orderly marketing arrangements
- 6630 Multi-fibre 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
- 7200 COMPULSORY NATIONAL SERVICES
- 7210 Compulsory national insurance
- 7220 Compulsory national transport
- 7900 MONOPOLISTIC MEASURES N.E.S.

8000 TECHNICAL MEASURES

- 8100 TECHNICAL REGULATIONS
- 8110 Product characteristics requirements
- 8120 Marking requirements
- 8130 Labelling requirements
- 8140 Packaging requirements
- 8150 Testing, inspection and quarantine requirements
- 8190 Technical regulations n.e.s.
- 8200 PRE-SHIPMENT INSPECTION
- 8300 SPECIAL CUSTOMS FORMALITIES
- 8900 TECHNICAL MEASURES N.E.S.
- 9000 MISCELLANEOUS MEASURES
- 9200 PUBLIC PROCUREMENT
- 9300 VOLUNTARY INSTRUMENTS
- 9400 PRODUCT LIABILITY
- 9500 SUBSIDIES

Source: UNCTAD (1994) in Bora et al. (2002) and De Dios (2004)

Appendix 3: Final version of the questionnaire on the internal market¹¹

(The questionnaire should be directed to the manager in charge of the product line the company is providing the monthly business survey results for. The questions should be answered with regard to this product line only, i.e. in cases of a company engaged in several product lines not for the establishment as a whole)

- A) Characteristics of company (only with regard to the specified branch/product line)
 - Branch/product line
 - Number of persons employed (domestic part)
 - Total export share and export share to EX countries (in % of domestic production)
 - Production plants in other EC countries

(yes/no)

Own sales office in other EC countries

(yes/no)

Formal cooperation agreements with companies in other EC countries

(yes/no)

B) Main questions (to be asked regardless if company exports to EC countries or not)

_

¹¹ Source: The Completion of The Internal Market: A Survey of European Industry's Perception of The Likely Effects, Research on The "Cost of Non-Europe" Basic Findings Volume 3 (Commission of The European Communities, Brussels 1988)

1) Removal of barriers

How desirable would you consider <u>for your company</u> the need to remove the following barriers to a completely open <u>Common Market</u> in the European Community*?

(Voluntary)

	Very Important	Important	Not so Important	We are satisfied with present situation
a) Difference in national standards and regulations (technical, safety, environment, etc.)	_			
b) Restrictions on open competition for government procurement	_			
c) Administrative barriers (excessive customs formalities)	_			
d) Physical frontier delays and costs				
e) Differences in Value added tax (VAT) and sales taxes				
f) Regulations of freight transport which increase transport costs (e.g. quotas)	_			
g) Restriction in the capital market (e.g. exchange controls)				
h) Implementation and application of Community law (e.g. too costly and takes too long)	_			
i) Other barriers, please specify				

^{*}EC member countries: Belgium, Denmark, Federal Republic of Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Portugal, United Kingdom.

(Vol	luntary)
(, O	iumum y j

1A Access to EC Markets

How would you assess the access to the EC-markets compared with the access to the average	of the
other Non-EC industrial markets at present?	

Ц	EC-markets easier for us
	No difference between EC and other markets
	EC-markets more difficult for us, because of(please specify)
	Don't know/not applicable

•	C . CC .		
2`	Cost effects	ot harrie	2rc

In the event that all these barriers (question 1) were removed:

2A) How large a <u>change</u> would you expect in <u>costs per unit</u> for your company's typical or average product

<u>Cost reduction</u>			<u>Cost i</u>	<u>ncrease</u>
Very significant	Slightly significant	No effect □	Very significan	Slightly t significant
Our cost p	er unit would fall by		Our cost per unit	would increase by
Less than 2%		Les	ss than 2%	
2 – 5%		2 –	5%	
6 – 10%		6 –	10%	
More than 10% (ple specify)%	ase		ore than 10% (please ecify)%	

2B) <u>In case you expect cost reduction</u> In which areas this effect will be most pronounced

	Very Important	Important	Not so Important	We are satisfied with present situation
a) Production process (increase in productivity, e.g. thanks to the effects of economy of scale and thanks to better access to technical information, more efficient research and development)	-			
b) Banking costs	_	_		
c) Distribution costs (including transport costs)	_	_		
d) Marketing costs	_	_		
e) Lower costs and greater availability of imported material				
f) Insurance costs				
g) Other areas, please specify				

3)	<u>In case you expect cost increase</u> Please specify reasons or areas where this effect will be most pronounced					
				• • • • • • • • • • • • • • • • • • • •		
	•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••	•••••
Sales e	effects of in	ternal market				
3A)	Consider the situation that would arise if a true internal market were established in the European Community and all trade barriers were removed or substantially reduced. Do you think that your company would in these circumstances , be likely to experience (after a period of adjustment a change in its sales volume? (Please tick one box on each line below)					
		Increase substantially	Increase somewhat	Remain unchanged	Decrease somewhat	Decrease substantially
(i) Our sales w						
to EEC	r <u>exports</u> <u>es</u> would		_			
to non-	ur <u>exports</u> - <u>EEC</u> ies would					
(iv) Ou sales to market						
If you expect any positive or negative impact on total sales (Questions 3B and 3C)						
3B)	3B) By about what percentage would your <u>total order volume</u> be higher or lower than without the completion of the internal market					
		<u>Higher</u>			Lower	
	В	Sy about%			By about%	Ö

3C) What are your <u>main reasons</u> for this expected change in sales volume (if possible please tick the single most important reason only)

In case of an expected <u>posit</u> <u>effect on sales vol</u>		In case of an expected <u>negative</u> <u>effect on sales volume</u>		
a) Reduction of product price in existing markets		a) Increased price competition from existing competitors		
b) Withdrawal of competitors		b) Appearance of new competitors		
c) Improvement in non- price competitiveness (e.g. changes in the product range, delivery times, after sales service, marketing)	_	c) Withdrawal from the market	_	
d) Ability to enter new (regional) markets	0	d) other reasons, please specify		
e) Generally faster growing product market thanks to the completion of the internal market	0			
f) Other reasons, please specify				

3) taking into account all the possible positive and negative effects of a completely open Common Market in the European Community by 1992. Would you expect that for your company and for the economy of your country as a whole the chances for more growth and economic dynamism outweigh the risks of more competition or the loss of market share?

	Your firm	Economy of your country
(a) Chances much higher than risks		
(b) Chances somewhat higher than risks		
(c) Chances and risks about the same		
(d) Risks somewhat higher than chances		
(e) Risks much higher than chances		

(Voluntary)

5) What changes to your company strategy would be needed within the next years in order to meet the requirements of a completely open Common Market?

Fields of strategy	Much more	Somewhat more	No change present state fully sufficient	Somewhat less	Much less
 a) Cooperation agreement(s) with companies - in other EC member countries - in countries outside the EC 					
 b) Investment in equipment and building In home country In other countries outside the EC 					
c) Size of product - Number of products/product variants within product range (enlargement of specialization)					
d) Research and development					
e) Measures to improve productivity (applying new production techniques, exploiting the economy of scale and economy of scope)					
f) Other fields, please specify					