

STANDARDS, REGULATORY REFORM AND DEVELOPMENT IN APEC: CASE STUDIES OF VIETNAM AND THAILAND

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Abstract:

This paper assesses the challenges confronting developing countries in APEC in their reform and modernisation of standards systems and related infrastructure. Vietnam and Thailand are examined as case studies. In both cases the move to internationalise standards and the quality of services strengthened during the 1990s. Technical capacities remain weak, but are improving in line with industry demands. Vietnam, in particular, has initiated a wide-ranging transition from a central planning government-led system of mandatory standards, to one now based on international norms and voluntary standards. Weaknesses in procedural rules and conformity assessment remain, dialogue with industry, and competition to encourage more rapid progress is limited.

In both countries, some standards and technical regulations (STRs) seem designed to be barriers to trade, but much fewer than in most developed country APEC economies. Protection in Vietnam, and even still in Thailand, mostly comes through crude policy instruments such as tariffs, quotas and bans. Policy makers in these countries sometimes view STRs as an acceptable, and indeed desirable “loophole” for maintaining protection within ASEAN, APEC and WTO protocols. The actions of developed countries do nothing to dispel this view. There is a “window of opportunity” to strengthen the institutional framework of systems in developing countries to avoid the mistakes of those who came before, and to make the abuse of STRs as trade barriers more difficult for protectionist interest groups.

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1. Introduction and Objectives

Standards and technical regulations have an important influence on trade and economic development and are consequently a central issue of trade policy discussion. While the development and application of standards and technical regulations (STRs) has many benefits, including the general facilitation of trade, particular regulations and standards may also act as barriers to trade. The challenge for all countries is therefore to design and implement welfare-enhancing STRs, while avoiding their abuse as instruments of protection from competition. In this context, 'welfare-enhancing' is typically trade creating, although not always when social and private valuations diverge.

Domestic technical regulations (such as environmental, health and safety regulations) are often used as trade barriers, and become more attractive as other forms of trade protection have been phased out. Such regulations, if not based on international norms, may adversely affect trade and are now the focus for continuing liberalisation efforts (Maskus & Wilson, 2000). The facilitation of trade also requires efficient regulatory structures and systems to support standards infrastructure. This “implementation capacity” can, however, be a two-edged word if STRs are being used to provide protection and divert trade.

The objective of this paper is an assessment of the most important challenges confronting least developed countries in the Asia Pacific Economic Co-operation (APEC) region in their reform and modernisation of standards systems and the infrastructure related to technical regulations. Vietnam and Thailand are used as case studies. In particular, the paper attempts to assess the strengths and weaknesses of the standards system, infrastructure and structure of government regulatory institutions governing imports in both Vietnam and Thailand.

In light of this information, the most important domestic policy reforms and infrastructure upgrades needed to strengthen market-driven standards systems in the Vietnam and Thailand are considered, and the potential benefits of APEC's standards and conformity assessment agenda and its relevance to expanded trade opportunities in Vietnam and Thailand are assessed. Recommendations on how to strengthen APEC's standards agenda are provided in relation to Vietnam and Thailand's experience and level of development, addressing possible

roles for institutions such as the World Bank, Asian Development Bank, UNCTAD and others, in support of upgrading standards research and infrastructure in developing members of APEC.

The paper begins by clarifying the subject matter and by outlining the issues and questions to address in assessing a country's standards system. The key relationships between standards, regulatory reform and trade are also discussed. The two APEC country case studies then provide of the current status of STR design and implementation in Vietnam and Thailand. APEC's standards agenda as it relates to Vietnam and Thailand is also surveyed. This leads to a more theoretical explanation of the nature, role and weaknesses of regulations in general and STRs in particular, in Vietnam and Thailand. The conclusion summarises the findings and recommendations of the study.

2. Definitions and measurement

2.1 Standards and technical regulations (STRs)

A regulation has been defined as a mandatory requirement imposed by public authorities on the characteristics of a product or its production process, whereas a standard is then defined as a voluntary specification emanating from market forces (Sykes, 1995). By this definition, regulations are often just mandatory standards, and this causes confusion with the lay understanding of a “standard”:

“A thing serving as a recognised example or principle to which others conform or should conform or by which the accuracy or quality of others is judged.”
(The New Shorter Oxford Dictionary, p. 3,028)

In this paper we refer to any such product controls collectively as standards and technical regulations (STRs), and specify their mandatory and non-mandatory exclusive sub-sets when relevant.

STRs can be classified according to the characteristics goods must possess, the conditions under which products are made, or labeling requirements. STRs specify technical requirements, either directly or by referring to or incorporating the content of a standard,

technical specification or code of practice, in order to protect human life or health (sanitary regulation); to protect plant health (phytosanitary regulation); to protect the environment and to protect wildlife; to ensure human safety; to ensure national security; to prevent “deceptive practices” (e.g. regulations designed for domestic objectives but which may discriminate against imports). A regulation may be supplemented by technical guidance that outlines some means of compliance with the requirements of the regulation, including administrative provisions for customs clearance, such as prior registration of the importer or obligation to present a certificate issued by relevant governmental services in the country of origin of the goods.

A detailed conceptual typology of STRs seems to be lacking. UNCTAD provide a rough guide through their classification of non-tariff measures:

- 8100 TECHNICAL MEASURES
- 8110 Product characteristic requirements
- 8120 Marking requirements
- 8130 Labelling requirements
- 8140 Packaging requirements
- 8150 Testing, inspection and quarantine requirements
- 8190 Technical regulations, *nes*

Development of a much more detailed classification based around the UNCTAD scheme is a research priority. This could be accompanied by developing simple and standard methodologies for relatively quick *economic* evaluation of particular STRs and STR sub-sets. In this way, up-to-date cross-country comparisons of STRs can be possible and outliers identified (suggesting possible use of STRs as barriers to trade). A comprehensive approach can facilitate development of indexes of “STR efficiency” for particular STR sub-sets, and even for STRs as a whole. The methodological weaknesses of such indexes are well known, but as the UNDP have shown with their Human Development Index, simply producing it encourages greater debate about the issues. In any event, such an approach is a justifiable second-best option where quantifiable aggregate measures are lacking.

2.2 STRs as barriers to trade

The academic policy interest about STRs centres upon the net welfare impact. Particular STRs can be welfare positive or negative, and deciding the net impact of a given STR can be complicated and involve subjective judgements about social costs and benefits. As a generalisation, mandatory STRs are more likely to be measures to protect narrow interest groups from international competition. Similarly, but not necessarily, STRs not in line with international norms are more susceptible to abuse as non-tariff barriers to trade.

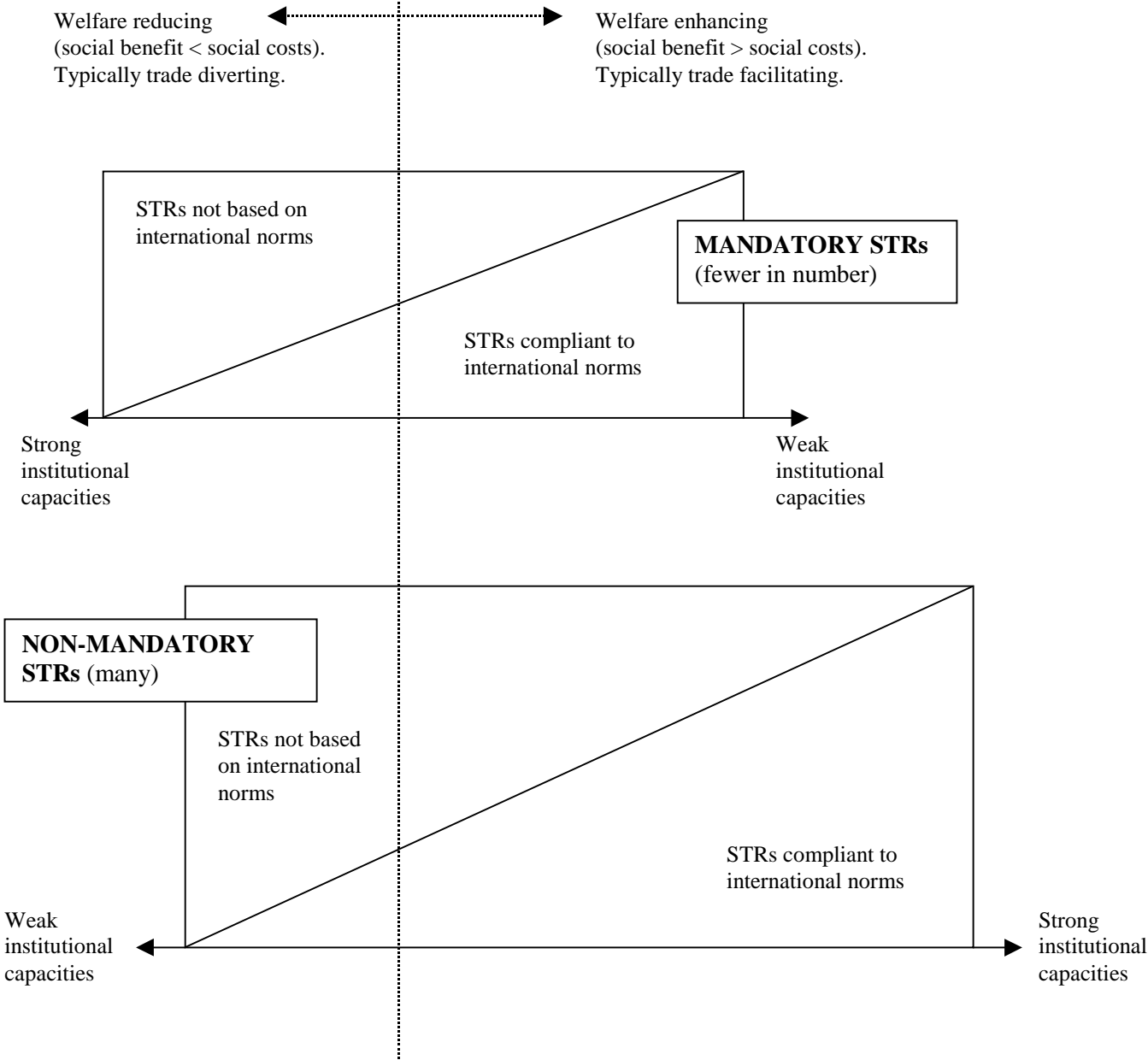
Figure 1 below captures this generalised schema. The schema illustrates tendencies with exceptions to everything. Mandatory STRs are fewer, but a higher proportion is welfare reducing. Mandatory STRs compliant to international norms are more likely to be welfare enhancing than those not compliant, but not always, particularly from an individual country perspective. Similarly, non-mandatory international STRs are generally trade facilitating, but weak institutional capacities may cause them to be trade diverting (just as strong institutional capacities enhance the trade diversion of protectionist mandatory STRs say, by rigorous conformity assessment processes).

This conceptual schema becomes even more convoluted when we consider STRs as non-tariff barriers to trade imposed by importing countries. ESCAP (2000), for example, argue that: “Measures only generally restrict trade when they discriminate against imports, and some will be more restrictive of trade than others. If domestic products are required to meet the same technical standard, for example, imports are not discriminated against” (p.11). Actually, imports are not discriminated against, but trade *and* domestic production are reduced by the imposition of measures that entail costs. Trade would fall more if domestic production was already producing, or easily able to produce at, say, newly specified standards and if overseas producers lacked supporting institutions to enable them to meet those standards. In such ways, STRs can be insidious mechanisms for short-run protection.

The above discussion highlights the complex nature and impact of STRs, and the need for a more rigorous conceptualisation of the subject. A generalised schema and classification scheme needs to be developed in detail and “fleshed out” with examples and case studies. From this we can develop methodologies of evaluation and measurement. There is no escaping

the conceptual complexity and mathematical intractability of the subject, for it is those very characteristics that make it an attractive mechanism for targeted protection.

Figure 1: Generalised schema of STRs and their net welfare impact.



2.3 Standards infrastructure

The standards system is a type of soft infrastructure with several layers. The first layer is the body of technical experts – a government agency, a private trade association, an international forum – which writes the standard. The second layer is the mechanism for assuring that goods and services that claim to meet the relevant standards do in fact live up to the claim. This is called conformity assessment. The third layer is the audit system that ensures that conformity assessment is working properly – that errors are kept within an acceptable level of tolerance given the type of product. This is the accreditation and recognition system.

Countries differ widely in the depth of their standards infrastructure. Demand for standards infrastructure is generally driven by the private sector, but guided by government policies. National differences largely reflect national needs and levels of development. Some countries have a long history of dealing with standardization and conformity assessment issues, while others are new to the game. Likewise, there are huge differences in the extent businesses use standards in their daily operations. Transitional economies, like Vietnam, are undergoing of process of transition from central planning standards systems. Standards infrastructure varies, depending on the size and staffing of national standardising bodies, and on national certification and laboratory accreditation capabilities.

3. Assessing standards systems

This paper makes a preliminary assessment of the standards systems in Vietnam and Thailand. It is not intended to be comprehensive, but to identify the generalised areas of strengths and weaknesses. A more thorough diagnostic process would identify concerns such as specific areas for change and training needs. To make any assessment, however, we need a methodological framework which, at the very least, identifies the questions requiring answers. The issues are important in assessing the strengths and weaknesses of a country's standards system were noted by Reihlen (2000), which we have extended, are listed below. This approach needs further development. For example, it assumes one model of "best practice" for standards infrastructure which may not be applicable to all countries. In general, however, most concerns are covered under the following five headings:

a) Procedural rules

- is standards work done in Standards Committees?
- is the scope of the Standards Committees determined by a Standards Council?
- is standards work undertaken by external experts?
- are technical committees set up on the principle that all interests are adequately represented?
- is the standards work open to public scrutiny?
- are existing standards reviewed at latest every five years?
- are product design specifications endorsed, or are performance specifications developed leaving their realisation to the competitive market process? (It is a WTO requirement that technical committees restrict themselves where possible to specifying performance requirements).
- is the standards code of the WTO-TBT agreement respected (i.e. are national and regional standards based as far as possible on International Standards)? Is it ensured that technical regulations are not prepared, adopted or applied with a view to or with the effect of creating unnecessary obstacles to international trade?
- does government use non-mandatory international management systems (ISO 9000 and 14000) to block imports?
- are sanitary/phytosanitary measures applied for no other purpose than that of ensuring food safety and animal/plant health (SPS agreement)?
- is the standards committee organised as far as possible mirroring the structure of ISO/IEC and ITU, thus enabling national standards institutes to interact with ISO/IEC and ITU technical committees?
- does the national standards committee coordinate their work program with international standards institutes in such a way that they can make their national interest heard in the international/regional standards writing process, and that new editions of international/regional standards can be implemented as national standards without unnecessary delay?

b) Interface between technical and legal standards

- do standards have the legal status of a recommendation?

c) Status of national standards institute (private association/governmental body)

- does the national institute define its corporate identity as a service to and a partner of industry and society at large, or as its master and controller?
- are all parties having a legitimate interest in technical standards fairly represented in the governing body and in the technical committees of the standards institute?
- is the institute responsible for all areas of technology, including electrotechnology, agriculture and information technology?
- does government act in the standardization and conformity assessment procedures as an equal partner among others?

c) Conformity Assessment

- does the institute operate standardization and conformity assessment in two divisions that operate independently from each other with a distinct separation of responsibilities?
- is the standards developing process free from control functions, particularly governmental control functions?
- is the national accreditation system a non governmental body of public responsibility which acts neutral between all interest groups, including government? Is it independent and its decisions not influenced by any other motives but integrity, transparency and quality? Government should not be empowered with specific outstanding rights in the interest of the credibility of a national accreditation system.
- is accreditation clearly separated from all other functions of conformity assessment? (A WTO requirement).
- if a national standards institute chooses to be a certifier and the operator of laboratories, inspectorates and auditoriats, it must ensure that is a fair competitor in the sense that it does not use government or institute money to subsidise its position in the market.
- does the conformity assessment system concentrate on certification or make use of manufacturer's declarations?
- is conformity assessment in all its branches organised in compliance with the relevant International Guides and Standards?
- do inefficient and duplicative testing and certification requirements exist (there is a big cost associated with mandates that industry re-test and re-certify)?

d) Transparency and Information

- does the standards system continuously inform society about its proceedings? Is the information system computer based, electronically accessible and serves national society as well as global partners as a WTO information point?
- does the information system continuously collect, store and keep accessible the following:
 - national standards and draft standards and proposals
 - national legislation and government-administrative acts with a technical content
 - national certification programs including requirements and procedural rules
 - register of accredited certification bodies
 - register of accredited testing, auditing and inspection bodies

e) Other considerations

- is the standards developing process streamlined and managed like other investments?
- does it seek to integrate de facto standards developed e.g. by industry consortia?
- do the technical committees serve as open forums of science and engineering, and a place of information and professional exchange?
- is research into the costs and benefits of standardization encouraged?
- are standards allowed to develop voluntarily, by consensus, in a public/private partnership out of dialogue between stakeholders, or are standards decreed from above and their use enforced?
- does the system invite and promote innovation, or delay innovation?

It can be seen that detailed assessment of national standards systems requires answering many questions, some of which raise complex issues concerning the purpose and impact of STRs. The two case studies in this paper are preliminary attempts to do this for Vietnam and Thailand, and as such provide substance for the generalised discussion of the STR challenge facing developing countries presented at the end of the paper.

4. Relationship between standards, regulatory reform, and trade.

Standards and technical regulations support market development by reducing transaction costs, and by “internalising externalities” (bringing social and private costs closer). When they are effective in this regard, they promote economic development and integration with global markets. A country that establishes product standards signals its product characteristics and standards preferences to foreign consumers and suppliers. Thus, adopting standards can improve resource allocation and diffuse technical information embodied in products and processes. Trade is promoted as an extension of the market-building impact of standards.

However, standards and technical regulations also impose costs that could restrain competition in international trade. Costs of complying with standards may be higher for foreign firms than for domestic firms, implicitly erecting a trade barrier. Compliance involves one-time costs of product re-design and building an administrative system. It also involves recurrent costs of maintaining quality control, testing, and certification. Thus a rich menu of cost-raising possibilities exists in which varying standards can raise entry barriers (higher up-front costs) or diminish the ability to compete (higher marginal costs). The need to incur compliance costs can provide an advantage to large firms in global competition.

Costs may be distinguished also in terms of meeting the precise technical regulations, on the one hand, and verifying that regulations are met, on the other hand. The latter task of conformity assessment presents the largest potential technical barrier to trade. Governments in importing countries may refuse to recognise tests performed by exporting firms or their public authorities and may not accept conformity declarations. They may insist on performing their own inspections of exporter premises and inspecting imported shipments. Thus, conformity assessment is vulnerable to bureaucratic non-transparency and susceptible to “capture” by domestic firms seeking protection. The costs of complying with such procedures can reduce the willingness to compete.

Developing countries lag behind developed countries in their capacities for effective certification and accreditation testing facilities (Stephenson, 1997). This situation has three important implications. Firstly, developing countries find it difficult to develop adequate standards and reach mutual recognition agreements with other nations. Secondly, they have

also not integrated themselves through accepting test results from abroad (Wilson, 1995). Thirdly, because authorities in developed countries may not have much trust in inspection procedures in developing countries, the former group are liable to collaborate on standards and mutual recognition agreements that exclude the latter group (Baldwin, 2000). The potential for trade and investment diversion in this scenario seems extensive. Further, variable international standards can serve to segment markets, raising market power and erecting entry barriers.

It is evident that governments and firms could establish strategic standards that aim to achieve market closure, alter the terms of competition in favour of domestic firms, or improve the terms of trade (Matutes and Regibeau, 1996; Fischer and Serra, 2000).

It would be difficult, and perhaps impossible, to identify particular standards as protectionist trade restraints. Because standards are aimed at correcting market imperfections or market failures (in principle)¹, there is no general presumption that relaxing or coordinating them would improve efficiency. Standards do not directly generate artificial and identifiable price wedges and rents, as do tariffs and quotas. Rather, their impacts are embedded in product prices, which depend on the market power created (or destroyed) by standards and regulations. Such rules could also protect monopoly rents.

However, some principles may be advanced around which to consider the role of standards in restraining trade. First, if a standard or its enforcement is purely cost-raising (e.g. through delays in inspection or arbitrary fees) it is inefficient and should be removed. Presumably if such a standard existed it would be to protect a competing domestic industry, so the loss in producer benefits to that sector would need to be compared to these gains. Second, if a standard is set at a level stronger than that needed to achieve a particular policy goal, it may have protectionist intent by virtue of reducing foreign profits at the expense of domestic profits. Third, if a standard is discriminatory in application or effect between domestic and imported firms, the margin of discrimination could be viewed as unnecessary protection and removed. Fourth, we could question whether a standard is chosen that is least disruptive to

¹ Market imperfections result from relaxation of the assumptions underlying the perfect market model, such as no transaction costs or perfect foresight. Market failures, however, are when social and private marginal values diverge (externalities), where market structures constrain optimal outcomes (oligopolies, monopolies), or where markets are “missing”.

trade among available policies. Finally, a standard might be considered protectionist if it mandates excessive caution in relation to scientific and reliable measures of risk.

Standards vary naturally across countries because of different levels of development, technological capabilities, endowments, and preferences. Nevertheless, at least one author has argued strongly that developing countries should adopt technical standards put forward by specified industrial nations (Stephenson, 1997). By moving towards more harmonised regulatory approaches, developing countries would directly absorb the technological knowledge inherent in standards and also promote inward technology transfer. Comprehensive international harmonisation of technical standards, however, is virtually impossible, and nor is it necessarily desirable.

Coordination does hold potential to expand market access for developing countries. Developing countries should therefore achieve more effective representation at the deliberations of international standards-setting bodies. The standards advanced are typically voluntary but could have exclusionary effects when set by a small set of national or industry interests.

Exporters have much to gain from mutual recognition agreements (MRAs) among themselves and with developed countries. However, the negotiation of such MRAs is dependent on building effective and competent domestic standards and procedures for conformity assessment and inspection. In this context, requests for technical assistance would be beneficial. Caution should be exercised in aggressively seeking MRAs. While there may be some gains to regulatory competition among MRAs (OECD, 1999), it is not evident that such arrangements necessarily avoid races to the bottom.

Economic theory is ambiguous in its predictions about how technical regulations should affect trade. For example, propagating standards could assist a country's export performance by guaranteeing quality and performance characteristics. It could also raise import demand, further expanding trade. However, trade could be restricted if there is a cost-raising and discriminatory element to standards. Moreover, if standards expand scale but reduce variety the impact on trade would be unclear.

5. Vietnam's Standards and Regulatory System

5.1 Economic conditions in Vietnam

The economic performance of Vietnam in the 1990s would be classified as a “miracle” if such achievements were not so common in Asia during the latter half of the twentieth century. GDP growth rates ranged between 8.1 percent to 9.5 percent during 1992-97, led by industry and services, but with average agriculture sector growth still an impressive 4.8 percent per annum. But it was from a low base, and by 1998 Vietnam's per capita trade volume and production of electricity was only a fraction of neighbouring countries, while the agriculture sector continued to account for a large share of employment and output (Table 1).

Table 1: Vietnam compared to some ASEAN economies

	Vietnam	Indonesia	Thailand	Malaysia
Life expectancy at birth in 1998 (years)	67.8	65.6	68.9	72.2
% of labour force in agriculture (1994)	68	51	57	45
% of 1998 GDP in:				
Agriculture	26	20	11	13
Industry	33	45	41	44
US\$ trade per capita in 1998	334	446	1,870	7,013
GDP per capita in 1998 (constant 1995 US\$)	331	972	2,593	4,251
GDP per capita in 1998 (PPP US\$)	1,689	2,651	5,456	8,137
Per capita production in 1995 of:				
rice (kg)	338	255	346	52
cement (kg)	73	114	563	509
electricity (kwh - 1993)	147	247	1,093	2,055

Sources: GSO (1998), *Vietnam Statistical Yearbook*. Statistical Publishing House, Hanoi
UNDP (2000), *Human Development Report 2000*. New York.

Vietnam's transition from central planning to markets, typically identified as “starting” in 1986, was a relatively painless affair of structural adjustment and stabilisation – at least for the first decade. The state sector was never large in Vietnam, where 80 percent of the population lived in rural areas, mostly growing rice. The collapse of the CMEA trading relationship forced restructuring in the modest state-owned enterprise sector. Institutional reforms also, however, created a boom in the urban household economy that soaked up the unemployed. The shift in markets was relatively easy without the burden of a large military-industrial complex, and

Vietnam's exports to CMEA found new Western buyers with ease (Le Dang Doanh & McCarty: 1995).

Vietnam in 2000 is an economy in its "second stage" of transition. That stage entails the fundamental reform of institutional structures to support competitive markets, including redefining the role of the state. Reform of standards and technical regulations is part of that process. Vietnam's standards were based on Soviet norms, which were typically mandatory but largely ignored, and "product focused" rather than "process focused". The move towards non-mandatory STRs, and shifting much of the quality responsibility away from the government, is part of the "second stage" of transition for economies like Vietnam, China, Russia and the Ukraine.

5.2 Tariff and non-tariff barriers to trade

Despite Vietnam's efforts at trade liberalisation since 1994, Vietnam's trade system remains highly restrictive. The IMF's *Index of Trade Restrictiveness* accords Vietnam with a rating of 9 on a scale of 1-10 (10 being the most restrictive) in 1999. Such restrictiveness is a result of a combination of high and frequently changed tariffs, the number of import quotas and bans, and pervasive bureaucratic obstacles. The effect of such protection is the creation and maintenance of a strategy of import substitution, characterised by inefficient production and high costs. The weakened competitiveness of such import substituting industries imposes additional costs on exporters.

The salient features of Vietnam's trade policies are summarised below, followed by a more detailed description and mentions of recent changes:

- closely managed legal trade (restrictions on types of goods traded, quantitative limits and bans)
- seriously disadvantaged export activities (favouring import substituting activities and production of non-traded goods and services over exports, export taxes, import taxes and controls, overvalued dong)
- protection supporting very inefficient activities (over 65 percent of FDI has gone into sectors with effective rate of protection of 60 percent, and over 40 percent had gone into sectors with effective rates over 90 percent)
- customs administration problems (corruption, smuggling, ineffective tax stamp system)
- an unnecessarily complex tariff (26 rates, minimum prices and weak administration)
- the adoption of non-transparent forms of protection ('spontaneous' decisions of state-owned commercial banks not to issue letters of credit for certain imports, use of bank payment procedures to limit import of consumer goods and goods produced domestically).

At the start of 1999, Vietnam introduced a new *tariff schedule* that reduced the maximum standard tariff rate from 60 percent to 50 percent, with the exception of a few products, and the number of rates was reduced from 14 to 10. However, the average tariff increased slightly from 13.8 percent to 15.5 percent, as the number of items at the 40 and 50 percent rates were increased. The new tariff schedule also introduced a three column system consisting of an ordinary rate (50 percent above the preferential rate), a preferential (most favoured nation and generally applied) rate, and a special preferential rate applied to goods from countries where there is a special preferential rate negotiated. Since many of these rates are set at zero, the dispersion of the tariff structure affords very high levels of effective protection.

Vietnam maintains some *customs surcharges*, which are often levied on an ad hoc basis. Surcharges of 2-10 percent are levied on certain iron and steel products, and on fertilisers at times, often to offset price fluctuations in international markets and avoid losses to SOEs. A special consumption tax, in principle levied on both imports and domestic production, is implemented to give additional protection to certain products. This tax is currently waived for domestic producers of motor cars and beer because of their losses.

Foreign trading rights restrictions are reported as the main distortion to trade flows, permitting informal trade controls and allowing specific SOEs to earn large rents. Increases in the number of enterprises with trading rights have generally been confined to large SOEs, and trading rights have tended to be specific rather than general.

Quotas and licensing control important areas of trade. According to Decree 57, ten types of imports are subject to licensing, including petroleum and oil, fertiliser, motor cycles, cars of 15 seats or less, steel and iron, cement, sugar, paper, alcohol, and construction glass. All (except petroleum) compete with domestic production, and quotas have generally been set at very low levels (typically zero). Additional categories of goods are temporarily added to the list of licensed goods, and these goods usually have import substitutes available or are in support of newly established production. Those for which licensing requirements are removed continue to be subject to impediments to trade, such as requirements of consistency with business registration and funding only by importers' foreign exchange, and the banning of issuing of letters of credit for imports of consumer goods and some other materials.

Exports of agricultural cash crops are also subject to some special surcharges, which change frequently. Some small private sector rice traders were given a small allocation of rice export quotas in 1998 and 1999. Also, 20 percent of garment export quotas to the EU were auctioned for the first time in January 1999.

McCarty (1999), in a survey of non-tariff measures affecting trade, identified and discussed the following non-tariff measures in Vietnam, within an internationally defined framework (UNCTAD): para-tariff measures, price control measures, finance measures, automatic licensing measures, quantity control measures, monopolistic measures, technical measures and internal measures. Most of these non-tariff measures have been utilised in Vietnam for some years, although finance measures became more prominent and expanded in 1998. He found that STRs were generally not used as trade barriers. Despite membership of ASEAN and APEC, he concluded that the direction of trade reform in Vietnam during 1996-1999 was ambiguous.

An explanation for the plethora of non-tariff barriers in Vietnam lies in understanding the logic behind Vietnam's trade policies and the legacy of central planning. Vietnam is still an economy "in transition" and a "developing economy". Consequently, policy making is largely Ministry-specific and unfocused, an excessive number of policy objectives exist for each policy instrument, many policy instruments are changed frequently for "fine-tuning" purposes, the language of legal documents remains unclear, and not all legal documents are systematically collected and published (McCarty, 1999).

The survey found that:

- Vietnam's non-tariff measures and non-tariff barriers are strong and numerous.
- The general direction of trade reforms is unclear, but possibly increasingly protectionist.
- Vietnam is committed to both protectionism and trade liberalisation.
- Removing non-tariff barriers is linked to other sectoral reform, particularly of state enterprises.

In general Vietnam does not use technical measures to serve as non-tariff barriers. The exceptions to this are some goods controlled by specific ministries. Vietnam's protection is achieved through the use of crude policy tools, so there is no need for less transparent policies. The ongoing process of global integration may, however, see a trend towards the use of

technical barriers to trade in Vietnam as pressure increases to remove more obvious measures, such as quotas. As elsewhere, if national policy makers are not convinced about the benefits of unilateral trade liberalisation (or are captured by interest groups), then technical measures become a useful option for maintaining protection.

Vietnam is, however, committed to trade liberalisation as an integral part of its global integration process. Vietnam's commitments under APEC are discussed below. Vietnam is also a member of ASEAN and AFTA that involves, firstly, that all tariffs will be reduced to 5 percent or less by the year 2006. The initial CEPT scheme lists have been submitted, and a tariff reduction schedule announced. Secondly, as products enter the Inclusion List Vietnam will have to eliminate all quantitative restrictions in respect of products under the CEPT Scheme immediately when the products start to enjoy the concessions applicable to those products. Thirdly, after those products are on the Inclusion List, Vietnam shall have to phase out other non-tariff barriers within a period of five years after the enjoyment of the concessions applicable to its products. To date the progress in eliminating non-tariff barriers has been very limited (McCarty, 1999).

5.3 Assessment of Vietnam's standards and regulatory system

5.3.1 Vietnam's standards system

Vietnam Standards (TCVNs) are national standards developed on the basis of:

- research results;
- the application of scientific and technological achievements;
- experience; and
- the adoption of international standards relevant to the socio-economic conditions of Vietnam.

TCVNs are used as the technical criteria for certification of conformity with Vietnam Standards, quality registration and quality control for imported and exported goods. The first TCVNs were issued in 1963. Up to now, more than 7,000 TCVNs have been developed and issued of which 4,400 are current (TCVN, 2000).

TCVNs are intended for voluntary adoption unless made compulsory under decisions promulgated by the Ministry of Science, Technology and Environment (MOSTE) or by

specific references to standards in other laws and regulations (see Appendix for the list of compulsory standards for 2000). Any public or private organisation, or individual, is bound to observe the mandatory standards, while Government encourages the implementation of voluntary standards. Of the current 4,400 standards, 100 are mandatory (most are now voluntary, but all were mandatory up to 10 years ago under central planning). The mandatory standards are those related to environmental hygiene, safety and to products “important to the national economy”.

Any organisation or individual manufacturing products concerning mandatory standards is required to apply for certification of conformity with TCVN. Any product manufactured in conformity with an applicable mandatory standard may not be sold in the market unless product certification is applied and granted after review. In reality, however, this rule is not strictly applied (JICA, 1997a). Governmental agencies are empowered to announce the mandatory standards applying to specific products within their areas of management. Other technical requirements, such as labeling, can be demanding but, nevertheless, do not appear designed as barriers to trade [Interview 1: Dr. Vu Van Dien].

Products applicable to voluntary standards may be sold without certification, but manufacturers may apply for conformity certification. There are standards which are designated as voluntary by MOSTE but implemented as mandatory by other ministries (JICA, 1997a). This problem reflects the conceptual legacy of central planning, where the state assumed responsibility for both the quality and quantity of production. It also reflects the political economy realities of removing bureaucratic control mechanisms.

Ministerial Decision M15 “Regulation on State Inspection on Quality of Imports and Exports” 397/QD, 10/06/1992 is the regulation serving as the basis of national quality inspection on export and import products. Related Decisions M16 and M20 are regulations relating to the publication of the list of export and import products subject to national quality inspection.

Technical regulations in Vietnam (8100) include product characteristic requirements (8110), marking requirements (8120), labeling requirements (8130), packaging requirements (8140) and testing, inspection and quarantine requirements (8150). Product characteristic requirements include technical specifications prescribing technical requirements to be fulfilled by products. Marking requirements include measures defining the information for transport and customs

that the packaging of goods should carry (country of origin, weight, special symbols for dangerous substances, etc.). Labeling requirements include measures regulating the kind and size of printing on packages and labels defining the information that may or should be provided to the customer. Packaging requirements include measures regulating the mode in which goods must be packed in conformity with the importing country handling equipment or for other reasons and defining the packaging material to be used. Testing, inspection and quarantine requirements include measures regulating compulsory testing of product samples by a designated laboratory in the importing country, inspection of goods by health authorities prior to release from customs or a quarantine inspection requirement in respect of live animals and plants.

5.3.2 Standards Infrastructure

The Act on Product Quality, 1991, (the fundamental law governing standardization, certification, accreditation and quality control activities) defines government organisations responsible for product quality to be composed of state administration agencies and quality management organisations of related ministries and institutions. State administration agencies include MOSTE, regional centres for standardization, metrology and quality control, and provincial departments for standardization, metrology and quality control.

State administration agencies assume the following duties:

- Setting up programs and plans for standardization and product quality; drafting national policies on product standards; issuance of legal documents on product standards within the scope of their authority; and supervision and inspection on implementation of programs, plans and regulations on product quality standards.
- Establishment of Vietnam standards, participation in the preparation of international standards, and recommendation on implementation of said standards.
- Product quality registration and granting of licenses.
- Certification of products and quality systems, and accreditation of testing laboratories.
- Quality inspection of export and import products.
- State inspection on product quality and disposition of cases violating the act within their powers.
- Guidance on organisational structure and profession to the organisations of ministries and institutes for quality management.
- Dissemination of information on standardization and product quality.
- Promotion of organised training on standardization and product quality.
- International cooperation in the fields of standardization and product quality.

The relevant legal structure consists of three levels: the highest level is the fundamental law (or ordinance/decree) issued by the premier or cabinet; the intermediate level is the ministerial decision (MOSTE and others) based on the fundamental law; and the lowest level consists of regulations issued by the Directorate for Standards and Quality - STAMEQ (executing ministerial decisions).

5.3.3 Standards development

STAMEQ is the Governmental Body under MOSTE having responsibility to advise the Government on issues in the fields of standardization, metrology and quality management in the country and representing Vietnam in international and regional organizations in the fields concerned. The main activities are (TCVN, 2000):

- To prepare the Rules and Regulations on Standardization, Metrology and Quality Control and submit them to the authorities for approving
- To organize the supervision and control on the implementation of the approved rules and regulations
- To establish the organization system on standardization, metrology and quality control and provide methodological guidance for all activities of the above system
- To organize the formulation of national standards and maintain the national metrology standards
- To provide the quality system certification and product certification, testing and calibration laboratory accreditation
- To implement the State supervision on quality of goods and measurement
- To conduct studies on standardization, metrology and quality control
- To carry out the activities of information, training and international relation on standardization, metrology and quality control

TCVN Technical Industrial Committees are organised under the Vietnam Standards Institute (VSI – a STAMEQ institute) to prepare draft standards. The Committees include Technical Committees and Sub-committees representing specific areas of technology. The TCs corresponding to international standardisation bodies are also organised under the VSI. Technical sections of VSI serve as secretariats of the Committees. Members of Committees are composed of representatives of government agencies, industries, universities, consumer groups and other organisations trade [Interview 1: Dr. Vu Van Dien]. VSI represents the national standards body and is responsible for cooperation activities internationally and regionally (JICA, 1997a).

The Act on Product Quality, 1991, requires Vietnam standards to be submitted by STAMEQ to MOSTE, and be approved, signed and promulgated by the Minister. Other ministries and provinces may establish and issue their own standards (Branch standards and Provincial standards). There are no standards developed by trade organisations. STAMEQ tries to adopt international standards where feasible trade [Interview 1: Dr. Vu Van Dien]. Vietnam has adopted European Quality Standards and is a member of various international and regional organisations (see appendix). Currently, more than 1000 international standards, including ISO, IEC, CODEX, STAN, and ASTM have been adopted as TCVNs.

Before 1990, TCVNs were developed by standards writing organisations/bodies. Later, for the purpose of international/national harmonisation, STAMEQ decided to develop TCVNs through technical committees. Since then, TCVNs have been developed through the cooperative efforts of interested parties. To date, a total of 77 technical committees have been established.

5.3.4 Conformity Assessment

QUACERT is the national certification body established by STAMEQ, and is responsible for (TCVN, 2000):

- Quality systems certification
- Environmental management systems certification
- Voluntary products certification
- Auditors registration, and
- Disseminating information, promotion and training on quality, quality systems, EMS, ecological protection.

QUACERT certification criteria and procedures comply with appropriate national and internationally recognised standards and guidelines, and certification is an independent and objective assurance that the company has effectively implemented an internationally recognised standard on quality management (TCVN, 2000). The certification system in Vietnam has been developed only recently and the country is now building internationally acceptable certification systems in terms of structure, operation, proliferation, and availability of human resources [Interview 2: Mr. Tua Anh].

Current certification activities include:

1. System certification, including Q-BASE quality system certification (adopted from Australia and New Zealand), environmental management system certification (ISO 14000), and quality system certification (ISO 9000).

In conjunction with ISO 9000 series, companies can implement one of three models:

- TCVN ISO 9001: 1996 – for use when conformance to specified requirements is to be assured by the supplier during design, development, production, installation and servicing.
 - TCVN ISO 9002: 1996 – for use when conformance to specified requirements is to be assured by the supplier during production, installation and servicing.
 - TCVN ISO 9003: 1996 – for use when conformance to specified requirements is to be assured by the supplier at final inspection and testing.
2. Product certification, consisting of one mandatory and three voluntary schemes:
 - Product certification A – to assess compliance with TCVN quality standards (voluntary)
 - Product certification B – to assess compliance with TCVN quality standards (mandatory)
 - Product certification C – to assess compliance with foreign standards (voluntary)
 - Product certification D – to permit foreign mark in compliance with foreign standards (voluntary)

Presently, only the cement industry use the type “A” mark, and while the value of the mark is not widely recognised the industry understands that the mark leads to consumer confidence and works as a competitive advantage. Products for which mandatory standards are established are not necessarily subject to mandatory product certification, hence only two items use type B: electric cables and electric fans. No certification has been made under the C or D categories trade [Interview 1: Dr. Vu Van Dien].

3. Export/import product inspection (JICA, 1997a):

- the mandatory inspection system is designed to prevent exports and imports of products that do not conform to specific standards
- specific standards are not limited to TCVNs mandatory standards, but include standards and ordinances of other ministries and foreign standards
- regardless of mandatory or voluntary TCVN, any products which are designated and considered by government as commodities must be inspected for safety
- inspection is requested by an individual manufacturer, exporter or importer to an accredited inspection organisation
- any export or import product subject to the mandatory inspection must be accompanied by a ‘certificate’ issued by the inspection organisation to authorise customs clearance. Note that no marking is made on products after inspection.
- any export product bearing the “VN mark” by receiving “product certification A or B” is exempted from this category

QUACERT relies on QUATEST for its certification testing service, and all import/export product inspection is undertaken by QUATEST.

5.3.5 Accreditation

Accreditation activity has started relatively recently (1992). QUACERT is not yet accredited and there is no accreditation body or scheme in Vietnam. The Bureau of Accreditation (BOA) accredits laboratories and inspection bodies only (export and import product inspection is conducted by accredited testing laboratories) and does not engage in accreditation of certification bodies and registration of auditors.

The Vietnam Laboratory Accreditation Scheme (VILAS) is based on the Act on Product Quality and its enforcement decree and regulations, and is operated by BOA. Using international criteria, VILAS accords formal recognition to laboratories with demonstrated capability and technical competence to perform specific calibration and testing. VILAS is a voluntary scheme, open to any laboratory that performs objective testing/calibration falling within the scheme and meeting the VILAS criteria of competence. The aims of VILAS are (TCVN, 2000):

- to upgrade the standard of testing and management of laboratories;
- to identify and officially recognise competent laboratories in Vietnam;
- to promote the acceptance of test data from accredited laboratories, both locally and internationally; and
- to integrate accreditation activities with those of other regional and international accreditation schemes.

STAMEQ keeps VILAS abreast with the latest international developments in Laboratory Accreditation by participating in the activities of ILAC (International Laboratory Accreditation Conference), APLAC (Asia Pacific Laboratory Accreditation Cooperation) and ACCSQ (ASEAN Consultative Committee on Standards and Quality). VILAS acts as a contact point for APLAC's inter-laboratory comparisons and proficiency testing. VILAS also offers a variety of training courses for laboratory management, laboratory personnel and assessors.

The Vietnam National Accreditation Scheme (VNAS) is a new scheme established by STAMEQ in 1995 to control and operate the entire accreditation system in the country, with the primary purposes of: establishing and internationally acceptable accreditation system;

accrediting certification bodies, testing and calibration laboratories, inspection bodies, and registration of auditors; to manage and operate in accordance with relevant ISO/IEC Guides and international standards; and to develop human resources capable of meeting international requirements (JICA, 1997a).

5.3.6 Government regulatory institutions governing imports

State administration of product quality is carried out principally through two measures: “Registration of product quality” (applied to domestically produced goods) and “State inspection on quality” (applied to exported and imported goods). MOSTE and the Ministry of Commerce jointly issue an annual list of export/import products subject to inspection. The inspection system is primarily designed to assure quality of products exported from Vietnam and prevent imports of products which quality is inferior to local products. However, products that have completed export inspection do not require specific marking, except for fishery products that require a special label (indicating the inspection system ensures the quality of the export products). The inspection system seems to be designed to protect businesses from the inflow of low quality products (JICA, 1997a). Table 2 lists the agencies carrying out state compulsory inspection for traded commodities.

In general, Vietnam does not use technical measures to serve as non-tariff barriers. The exceptions to this are some goods controlled by specific Ministries. The government bodies involved in the administration of foreign trade in specific products include:

- Ministry of Industry – includes chemicals, toxic chemicals and intermediate materials for their production.
- Ministry of Agriculture and Rural Development – includes wild animals, pesticides and materials for their production, veterinary drugs and materials for their production, feeds and materials for their production, and animals and plants for breeding.
- Ministry of Health – includes pharmaceuticals, substances that may cause addiction, pre-substances, and cosmetics that may have impacts on human health, and medical tools and equipment. The management of the import of pharmaceutical products is done with the explicit aim of protecting domestic production, probably all of which is done by state enterprises. Only 38 enterprises are authorised to import pharmaceutical products, all of which belong to the MoH. Pharmaceuticals for retail sale face tariffs and a licensing system. A license is required to import any particular pharmaceutical product. At present there are some 3,000 registered pharmaceutical products, with licenses issued for between one and three years. License numbers must be printed on boxes, and instructions must be in Vietnamese. Fees are charged for product assessment and registration.

Table 2: Agencies carrying out state compulsory inspection for traded commodities

Products	State Inspection Agencies
Imports Milk, flour, sugar, monosodium glutamate, alcohol and non-alcoholic beverages, food additives	Quality Assurance Testing Centres 1, 2, 3 (MOSTE); Nutritional Institute (Ministry of Health); Nha Trang Pasteur Institute (MoH); Public Health Hygiene Institute of Ho Chi Minh City (MoH).
Fertilisers	Quality Assurance and Testing Centres 1, 2, 3 (MOSTE)
Insecticides, fungicides, herbicides	Quality Assurance and Testing Centres 1, 2, 3 (MOSTE); North and South Centres for Pesticide Inspection (Ministry of Agriculture and Rural Development)
Explosives and related accessories	Laboratory of Mine-Chemical Enterprise of Quang Ninh (Ministry of Industry); Explosives Centre of Military Technical Institute (Ministry of Defence)
Fish (other processed fish), crustaceans, molluscs (processed crustaceans and molluscs)	Department of Aquatic Resource Protection (Ministry of Fisheries); The National Fisheries Inspection and Quality Assurance Centre (MoF); Quality Assurance and Testing Centres 1, 2, 3 (except breeding shrimp) (MOSTE)
Goods under management of MOSTE	Quality Assurance and Testing Centres 1, 2, 3 (except breeding shrimp) (MOSTE)
Exports Fish (or processed), crustaceans, molluscs (or processed)	Department of Aquatic Resource Protection (Ministry of Fisheries); The National Fisheries Inspection and Quality Assurance Centre (MoF); Quality Assurance and Testing Centres 1, 2, 3 (except breeding shrimp) (MOSTE)

Source: McCarty, A (1999) *Vietnam's Integration with ASEAN: Survey of non-tariff measures affecting trade*, UNDP, p. 88.

- Ministry of Aquaculture – includes aquatic breeds, aquacultural feeds and materials for their production and chemicals for the protection of aquatic life.
- Ministry of Culture and Information – includes printed works (books, newspapers, magazines, paintings, photographs and calendars), cinematic works, recorded audio and video tapes and disks, and certain kinds of special printing equipment.
- Ministry of Labour, Invalids and Social Affairs – approves the importation of products relating to labour safety such as pressure-resistant equipment (boilers, tanks and containers for storing liquid and gasses under high pressure), lift vehicles, elevators and explosive materials.
- Vietnam State Bank – authorises the importation of specialised banking equipment.
- General Department of Posts and Telecommunications – controls the importation of radio transmitters, receivers and other radio emitting equipment, telephone exchanges.

In addition to import licenses issued by the Ministry of Trade, the products subject to specialised control should have written approval from respective Ministries before their importation.

5.3.7 Recommendations for strengthening standards in Vietnam

Standardization in Vietnam has nearly 40 years of history since the Institute for Standardization and Metrology was established in North Vietnam in 1962. The current standards system consists of the necessary three levels of infrastructure (standards development, conformity assessment and accreditation) although the certification and accreditation systems have developed only recently. Vietnam is a member of various international and regional standards organisations and has made some attempt to incorporate international standards where practical. The system of standards has become increasingly used by state-owned and private enterprises, producing tangible results in the promotion of standardization activity.

Some of the weaknesses inherent in the Vietnam standards system, and related recommendations include²:

- A reliable mechanism needs to be developed to operate the system already in place, in the direction of meeting industrial needs and establishing internationally acceptable services, or to prepare for such development.
- COMECON and similar standards are deeply rooted in Vietnams standards. As Vietnam deepens its relationship with international markets it cannot continue to rely on its own standards. Efforts need to be made to review the national standards system and base it more on international standards.
- It is likely that different manufacturers will increasingly adopt different standards in the future. Heterogeneity will be increasingly brought into the domestic market, hindering standardization efforts at the national level and causing serious confusion if not dealt with properly.
- Industry in Vietnam is facing a transition from the traditional business environment to a competitive environment where enterprises must find and introduce appropriate technology. There is a shortage of human resources who have knowledge and experience of the new system. In particular, there is a need for qualified personnel in the areas of quality control, certification and accreditation. More than just a transfer of knowledge, it is imperative to develop human resources capable of applying knowledge to the local environment by adapting it through trial and error.

² Based on JICA (1997a and 1997b).

- Even if many national standards are established, they do not create value to an industry unless they are widely used and their compliance results in expected quality levels in the actual production process. Thus, the development of national standards must be accompanied by efforts of promotion of standardization and quality control at each level of economic activity (national, industrial and enterprise levels).

These general findings lead to the following specific recommendations:

1. Public administration system and organisational setup

Review the basic concept of standardization and establish a public forum to reflect opinions of industries, consumers and universities in standardization and quality control promotion activities. This should involve creating a standardization council that is organised under broad-based membership representing industries, consumers, and universities. The council will confer on STAMEQ's basic policymaking and planning. When industries can assume leadership in standardization activity, STAMEQ's role should be shifted to the supporting organisation having expertise and experience in standardization activity.

Promotion of regional cooperation in standardization and quality control initiatives. There are a number of areas, which can be jointly developed, to enjoy benefits from scale of economy and resource sharing. These areas should be clearly identified and opportunities for regional cooperation pursued.

2. Development and dissemination of standards

Establishment of standards as voluntary standards. This would help regain the reliability in present standards and certification which has been lost due to insufficient enforcement of mandatory standards, and would allow the development of standards into the true technical foundation for industries.

Review of TCVN standards using GOST/COMECON as technical base. Vietnam fails to obtain the latest versions of GOST on a continuous basis, so that no updating has been carried out. COMECON standards have presumably ceased to be updated. Thus, TCVN based on these standards may well be outdated. TCVN need to be revised and updated to ensure consistency with international standards.

Enhancement and expansion of technical information centres. There is a strong need for technical information among industries. It is difficult to obtain technical information on foreign standards, international standards, and quality control.

3. Certification and accreditation system

Activation of the product certification system. Improvement is required in 4 areas: complete coverage of products to be certified under the system; the development and enhancement of standards as the basis of the system; the reinforcement of the certification organisations and the securing of their legal status; the establishment of the inspection organisation and resources to support the system and its operation; and, implementation of measures to improve capability of enterprises in their quality management.

The mandatory inspection system must first gain public confidence, as seen in voluntary certification. It must be enforced consistently. Streamline inspection procedures by exempting products that bear designated foreign marks. Mutual recognition with certification systems of importing countries should be considered.

International and regional cooperation should be encouraged in establishing the mandatory certification system. As Vietnam imports a variety of products from neighbouring countries, initiatives should be made to promote mutual acceptance of mandatory certification with these countries, which would help prevent trade barriers and streamline operation of the system.

4. Quality control

Quick and mass promotion of the new concept of quality control, combined with targeting key enterprises, is required. Development and promotion of the quality system for small-and medium-sized enterprises should be pro-actively pursued. Procurement or upgrading of testing equipment, measuring instruments, and calibration equipment to support quality control practice is essential to provide the necessary services.

5. Testing and inspection system

The certification system must assume the effective use of existing organisations and facilities (including those to be established in the future). It should be accepted that QUATEST will be able to provide other services, such a mandatory certification tests and inspection, for the purpose of maintaining sustainable management of QUATEST. Building a laboratory accreditation system that is mutually recognised is another priority.

5.4 Conclusions about Vietnam

Vietnam's STRs are transition from a mandatory system of sporadic implementation to a system based mainly on non-mandatory STRs and less direct government responsibility for quality control. It is a complex process that involves technical, institutional and political economy reforms. Technical constraints are non-trivial. Certification and accreditation, quality control, and testing and inspection facilities are generally inadequate in terms of equipment and technical capacities. Nevertheless, there is also a need to continue progress in institutional reforms, including improved information flows, more internationalisation of standards, and fostering a stronger role for non-government bodies in the process.

In the 1990s, progress to reform Vietnam's STRs was very impressive. The procedural rules still lack wide representation, and conformity assessment does not satisfy some of the "free from government" and fair competition criteria noted in section three above. But given the broad nature of the reform challenge, achievements have been substantial. Further, the reform of STRs appears to have focused on trade facilitation as the primary objective. This is not so much from a clear commitment to the benefits of free trade, but rather because protection has been readily available through alternative and simpler trade policy instruments. These alternative instruments, such as bans, quotas, and licensing, are to be phased out under ASEAN and APEC agreements. Membership of the WTO would speed up the pace of trade liberalisation. In this environment, the possibility that STRs will become increasingly used for protectionist purposes is very real. Some Vietnamese policy makers already have plans for this, and indeed seem to view the process as simply following the lead of more "developed" trade regimes:

"The non-tariff barriers that ASEAN nations employ are of great diversity, the most sophisticated ones being specifications of technical standards. For the case of Vietnam, non-tariff measures are rudimentary ones such as licences and quotas. In order to ensure domestic protection, we are studying the introduction of similar non-tariff measures before the time comes for their removal." (Ha Huy Tuan 1996, p.3)³.

³

Mr. Tuan worked at the AFTA Vietnam National Office in 1996.

"It is very difficult for local enterprises when non-tariff measures are lifted because domestic production's competitiveness is still modest. The Government should consider supplementary measures which conform with international trading practices and are usually applied by other countries for a certain period to protect domestic production ... It is not easy for Vietnam to meet all the CEPT requirements and protect local production at the same time. The ministry [of Trade] is expected to apply other measures such as quality and hygiene standards, labor safety and surcharges. The ministry is also considering new tariffs [tariff quotas], anti-dumping, anti-discrimination ... It needs sufficient and modern management to apply these measures, and the new tariffs must cover all imports. Not so easy." (Cao Cuong, *The Saigon Times Weekly*, 29 August 1998).

Restricting the capacity of developed countries to exploit STRs as barriers to trade is certainly important to ensure that they keep their markets open, and open those that are relatively closed. Those restrictions should also apply, however, to developed countries to stop them making the same mistakes.

6. Thailand's Standards and Regulatory System

6.1 Economic conditions in Thailand

Thailand is substantially richer than Vietnam (see Table 1), being classed among the lower ranks of middle income countries according to the World Bank. While GDP growth rates were negative during recent years (as a result of the Asia Crisis), and are currently still quite low, a gradual recovery is projected due to the progress made in resolving economic and financial problems. In 1998 Thailand's per capita trade volume and production of electricity were much larger than that of Vietnam, but like Vietnam the agricultural sector continues to account for a large share (almost 60 percent) of employment.

The Thai economy has made a rapid transition since the 1970s from an agrarian base to one that is heavily dependent on industry. Manufacturing now provides more than 40 percent of GDP and 80 percent of export earnings, while agriculture's share has fallen to 10 percent in both instances. Manufacturing has diversified from import substitution to export-oriented

industries, the assembling and output of intermediate goods and value-adding. Thailand's trade structure has evolved in line with its economic development and integration into the world economy. Compared to its formerly central-planned neighbour, Thailand has a much better developed standards and technical regulations system.

6.2 Tariff and non-tariff barriers to trade

While quite a few tariff and non-tariff barriers to trade still exist in Thailand. The government has been shifting its trade policy in order to reduce protectionism and improve the overall tariff structure including a progression of import tariff adjustments, aimed at reductions in compliance with World Trade Organisation (WTO) principles. As a result, Thailand does not prohibit imports in any category and continues to liberalise trade accordingly (UN, 1999).

In general, imports require no formal approval, with import licenses currently being required for only 26 items. Some items that do not require licenses must nevertheless comply with applicable regulations of concerned agencies, are subject to extra fees, or must have certificates of origin.

While Thailand is required to liberalise markets such that import licenses will no longer be in use. Importers must possess a certificate that indicates the quota amount to be approved by the Customs Department in order to obtain a low tariff rate (a measure applied only among WTO members). Import prohibitions exist for counterfeit products, goods utilizing deceptive practices and goods infringing copyright and anti-dumping duties are applied to several goods.

From 1985-1995, import duty rates have been changed several times with only six bands of import tariff bands now existing: three standard rates (0%, 5% and 10%) , and three special rates (0%, 1% and 30%) applied in cases where it is thought essential to provide Thai products with either cheap inputs or greater protection. In 1999, the average import tariff rate was 17 percent (UN, 1999).

The ASEAN Basic Agreement on Preferential Trading Arrangements (1977), of which both Thailand and Vietnam are signatories, provides a framework for preferential trading and trade

liberalisation among member countries. The exchange of tariff preferences among member countries is the most prominent mechanism under the agreement with margins of preference ranging from 5 to 20 percent.

According to the Export and Import Act, B.E. 2522 (1979), the Ministry of Commerce, with the approval of the Council of Ministers has the power to fix, revise or cancel rates of special fees for import and export. The Customs Department has the authority to collect a business tax which is levied on almost all imports. Assessment of the business tax is based on cost plus duty and a standard profit. The business tax on most imports is usually 1.5 percent or nine percent. For some import items, such as motor vehicles, the business tax can range up to 40 or 50 percent. In addition to the business tax, there is a municipal tax which is equivalent to 10 percent of the business tax.

The Board of Investment (BOI) is given the power to levy surcharges on imports, if necessary, to protect local or promoted industries. Such surcharges are levied on specific items. Recently, the BOI has been placing less reliance on imposition of surcharges.

In Thailand, simple protection measures are used, rather than STRs, as barriers to trade. The following is an example of some barriers:

- The Thai Food and Drug Administration issues licenses for food and pharmaceutical imports. This process can be a barrier due to the cost, the length of the process, and occasional demands for proprietary information.
- Some goods are subject to a Tariff Rate Quota (TRQ), and have restricted entry periods under the TRQ, making them not competitive.
- Despite declining tariff rates under WTO rules, duties on many high-value fresh and processed foods remains high, making entry into Thailand expensive.
- Arbitrary customs valuation procedures sometimes constitute a serious barrier to goods. The Customs Department has used the highest previously declared invoice value as a benchmark for assessing subsequent shipments from the same country. That allows Customs to disregard the invoice value of a shipment in favour of a benchmark amount. This practice has had a particularly damaging effect upon trade in agricultural products, which often have seasonally fluctuating values. However, reforms are underway which will remedy some of these problems.
- Customs duties are sometimes arbitrary in other ways, e.g. import duties on unfinished materials are higher than those on finished goods in some categories, proving a burden to firms that manufacture or assemble in Thailand.

6.3 Assessment of Thailand's standards and regulatory system

6.3.1 Thailand's standards system

For the purpose of ensuring safety or preventing harmful effects which may befall the public, the industry or the economy of Thailand, any particular kind of industrial products which shall conform with a standard may be determined by the Thai Industrial Standards Institute (TISI) by means of a Royal Decree. This type of standard is referred to as a "compulsory standard". Any person who manufactures or imports for sale in Thailand industrial products which are required by the Royal Decree to conform with the standard must produce an evidence to a competent official for inspection and receive a license from the Industrial Product Standards Council (TISI, 2000). Up to 31 March 2000, TISI promulgated 60 compulsory standards.

The Food and Drug Administration (FDA), in the Ministry of Public Health is the government entity whose main responsibility is to protect consumers from substandard or harmful products. Strict regulations are in effect concerning food items and medicines. The Ministry of Public Health prescribes standards, qualities, methods of manufacture and labeling requirements for controlled foodstuffs and medicines. Goods under the jurisdiction of FDA, imported or locally produced, are subject to the same licensing, registration and labeling requirements. Apart from food, such goods also include cosmetics, household hazardous substances, narcotics, medical devices and psychotropic substances. In the Thai market, buyers prefer to have accompanying labels, instructions and descriptions in Thai for imported products. For many products it is mandatory to have labeling, infrastructures or warnings in Thai. International agreements, both bilateral and multilateral, have shortened and simplified procedures for granting FDA licenses and registration. Transparent time requirements are explicitly declared, with any delays justified to the applicant. In general, standards for food and drugs set by the Thai FDA are similar in scope with international standards such as Codex, ISO and pharmacopoeia.

The Customs Department may require a certificate of origin for imports from ASEAN member countries. The Customs Department, depending on the nature of the shipment, may also require a quality control certificate. The Department of Medical sciences, Ministry of Public Health is responsible for issuing the health and sanitary certificates concerning food and drugs. An export or import license may be required for specific goods.

Details concerning standards for imported products are set forth under the Industrial Products Standards Act, B.E. 2511 (1968) and its amendments No. 2(1979), No. 3 (1979), No. 4 (1988) and No. 5 (1999), together with related ministerial guidelines

TISI operates a third-party certification system. It is empowered by the IPS Act to operate product certification to the requirements of established Thai industrial standards, and product registration where the standard for such product has not been developed.

Product certification

Under the IPS Act, TISI is the sole national body for certification of industrial products. Any manufacturer whose product is in conformity to a Thai industrial standard may apply for product certification. In order for his product to be certified, not only the product itself must satisfy the requirements of the standard but also the inspection of the factory must confirm adequate quality control of the production process. Successful manufacturer is awarded a license to display TISI Standards Mark on his product.

Product registration

To date more than 1400 TISI standards have been drawn up but still are not enough to cover all products. Where the need arises for manufacturer of product without established standard to have his product certified, he can instead apply for product registration. Products are registered with, and at the discretion of, the Committee on Product Registration. Criteria for registration are specifications issued by other public agencies, foreign national standards, international standards and research data. Registered products are maintained in the List of Registered Products and enjoy the same privileges as certified products in so far as government procurement is concerned.

There are two main categories of TISI Standards Marks that are applicable today. They are the product certification marks and the system certification marks.

Product certification marks, of which there are three, differ according to the type of standard applied for, and are to be shown directly on the products that have complied.

A *voluntary standards mark* on any product indicates that the product is in conformity with a TISI standard, that its quality and reliability are assured, and that the manufacturer has voluntarily applied for the certification of the product.

A *compulsory standards mark* is displayed on products, local or imported, that are required by Royal Decree to be in conformity with a mandatory standard. Hence, the manufacture and import of such products must be licensed.

A *safety mark* is relevant to certain products with additional safety requirements which are also mandatory. These products require a license for their manufacture and/or import as in the case of those under compulsory standards and bear the Safety Mark after demonstrating compliance. System certification marks are used only on printed documents and advertisement media to indicate compliance of an organization with the respective system or scheme requirements. They are prohibited to be used on the product or in any way as to imply that a product is certified.

The *Quality System Certification Mark* may be used by organizations operating a good quality system meeting the requirements of ISO 9000 and registered as certified firms by TISI.

The *Environmental Management System Certification Mark* may be used by any organization which is successful in the implementation of an environmental management system to ISO 14000 and has been certified by TISI.

The *Laboratory Accreditation Mark* can be used after assessment by TISI confirms a laboratory's competence and compliance with ISO/IEC Guide 25, the laboratory can make use of the laboratory accreditation mark.

TISI's participation in international standardization work serves primarily for the transfer of technology to Thailand and for the protection of national interests in so far as international standards are concerned. The institute has maintained close cooperation with other standards organizations, both at the international and regional level, including membership of ISO, IEC, and CAC. TISI also participates in the activities of PASC, joins the ILAC, is active in the regional standardization activities of ASEAN and acts as the coordination office of the ASEAN-EEC Industrial Standards and Quality Assurance Programme.

6.3.2 Standards Infrastructure

TISI is the national standards body for Thailand. It was established under the Ministry of Industry by virtue of the Industrial Product Standards Act B.E. 2511 (1968). According to the Act, the governing body for TISI is the Industrial Product Standards Council. The Council is responsible for policy making, sets the priority of standards to be prepared, recommends qualified persons for the Minister to appoint to technical committees, arbitrates and awards licenses under its certification scheme (TISI, 2000).

The primary functions of TISI are:

- To prepare and publish national standards (TIS)
- To grant licenses to use the TISI Standards mark
- To operate quality system certification
- To operate laboratory accreditation systems
- To promote the implementation of standards
- To represent Thailand in the International Organization for Standardization (ISO)
- To represent Thailand in the International Electrotechnical Commission (IEC)
- To be the national contact point of the Joint FAO/WHO Food Standards Programme (Codex Alimentarius Commission)
- To act as the national inquiry point under the WTO/TBT and SPS codes.

6.3.3 Standards development

Thai industrial standards or TIS are prepared by various technical committees, each consisting of a balanced representation of manufacturers, consumers and experts, all having common interest in the product being standardized. Technical committees are appointed by the Minister of Industry. They have the secretariat and technical assistance of TISI in their undertaking. Elaboration of all standards is a consensus process. Finalized standards are scrutinized by specific technical committees and are subject to the approval of the Industrial Product Standards Council. Approved standards are published in the Government Gazette and undergo revision periodically, i.e. every five years (TISI, 2000).

6.3.4 Conformity Assessment

TISI has revised its criteria for conformity assessment of product certification (voluntary and compulsory standards) to be used as a guideline for certification and surveillance with a view to (TISI, 2000) :

- (1) being in accordance with the international system of conformity assessment, and the development of industrial sector;
- (2) being in accordance with the Ministry of Industry's policy on encouraging the industrial sector to be responsible for themselves, society as well as consumers;
- (3) enhancing the supervisory role of the government sector;
- (4) increasing the potential of the industrial sector;
- (5) ensuring consistent practices and transparency.

Product certification is based on two technical criteria :

- (1) Testing of products to ensure conformity with the applicable standards
- (2) Assessment of the factories' quality control system according to specified conditions.

TISI conducts testing mostly for the work of the institute but it offers the service to the public as well. Operating in accordance with ISO/IEC Guide 25, the ISI Testing Centre is capable of performing tests in the fields of electrical and electronics, mechanical, materials, chemical, construction materials, food and agricultural products. Within TISI, the testing serves for R&D, standards development and certification purposes. Provision of technical information and advice on testing to those interested is possible.

Assessment of certification for imported products (Compulsory standards)

To ensure that the control of importation for sale in the Kingdom industrial products required by the Royal Decree to be in conformity with standards (compulsory standards) as specified under Section 21 of the Industrial Product Standards Act is in a non-discriminatory manner between importation and local manufacturing according to the WTO/TBT Agreement, TISI has revised assessment criteria as follows :

Case 1 : Foreign factories which have received the ISO 9000 certification and their product testing has been carried out by accredited laboratories according to ISO/IEC Guide 25,

- (1) the factories will be exempt from the quality control system assessment, and
- (2) testing results of accredited laboratories will be acceptable to TISI for each import provided that:

- (a) ISO 9000 certification bodies and laboratory accreditation bodies have reached Mutual Recognition Agreements (MRA) with TISI, or
- (b) ISO 9000 certification bodies and accredited laboratories are accredited by the National Accreditation Council (NAC) of Thailand, or
- (c) ISO 9000 certification bodies and accredited laboratories are accredited by accreditation bodies which have reached Mutual Recognition Agreements (MRA) with NAC of Thailand.

Case 2: Foreign factories which have received the ISO 9000 certification or their product testing has been carried out by accredited laboratories according to ISO/IEC Guide 25

For factories which have received the ISO 9000 certification,

- (1) the factories will be exempt from the quality control system assessment, and
- (2) product sampling for testing will be carried out for each import provided that:

- (a) ISO 9000 certification bodies have reached Mutual Recognition Agreements (MRA) with TISI, or
- (b) ISO 9000 certification bodies are accredited by NAC of Thailand, or
- (c) ISO 9000 certification bodies are accredited by accreditation bodies which have reached Mutual Recognition Agreements (MRA) with NAC of Thailand. For the latter case,

- (1) the quality control system assessment will be carried out on technical files of factories presented to TISI by importers, and
- (2) testing results of accredited laboratories will be acceptable to TISI for each import provided that:
 - (a) laboratory accreditation bodies have reached Mutual Recognition Agreements (MRA) with TISI, or
 - (b) accredited laboratories are accredited by NAC of Thailand, or
 - (c) accredited laboratories are accredited by laboratory accreditation bodies which have reached Mutual Recognition Agreements (MRA) with NAC of Thailand.

Case 3 : Foreign factories which have not received the ISO 9000 certification or their product testing has been carried out by non-accredited laboratories according to ISO/IEC Guide 25

- (1) the quality control system assessment will be carried out on technical files of factories presented to TISI by importers
- (2) product sampling for testing will be carried out for each import.

6.3.5 Accreditation

Under the WTO Technical Barriers to Trade Agreement, Thailand sees the urgency of adjusting its standardization system to keep up with international standardization development. It also recognizes the need to encourage the public and private sectors concerned with export to progress together in the same direction and in a more systematic and standardized fashion, to maintain competitiveness in the world market. Hence, by the resolution of the Minister

Council, the National Accreditation Council (NAC) of Thailand has been established to administer the accreditation system of the country.

Through the process of the Thai accreditation system (TAS), the National Accreditation Council (NAC) gives formal recognition that a certification body is competent to carry out specific function or task according to the relevant international requirement. The structure of NAC enables the participation of those involved, and having interests, in the accreditation, from the government and the private sector alike. NAC is chaired by the Minister of Industry, with the Director of the Office of the National Accreditation Council as the secretary. NAC has as a policy to operate and coordinate systematically and impartially a single national accreditation system to meet international requirements.

Accreditation operated by NAC covers 5 schemes, the service of which is open respectively for the following organizations :

- Quality system certification bodies
- Environmental management system certification bodies
- Inspection bodies
- Laboratories
- Personnel and training registrars

TISI administers its laboratory accreditation in accordance with ISO/IEC Guide 58 since the establishment of the scheme in 1995. The scheme serves to assess and insure the competence of private and public laboratories in performing to the international requirements of ISO/IEC Guide 25. Through this scheme, accredited laboratories can secure recognition of their competence which in the future will make easier mutual recognition of test reports among accredited laboratories. To date, more than 10 laboratories have been accredited and are entitled to the use of TISI laboratory accreditation mark.

6.3.6 Government regulatory institutions governing imports

Items subject to import licensing are under the control of the Ministry of Commerce, and a number of items are subject to controls under laws and regulations of other ministries, such as the Ministry of Public Health, the Ministry of Industry and the Ministry of Agriculture and Cooperatives. Under the Controlling Importation and Exportation of Goods Act 291979), the BOI can impose temporary controls on imports as a protective measure for promoted local industries.

6.4 Conclusions about Thailand

The strengths of Thailand's standards system include the fact that Thailand's standards work is done in standards committees. A standards council determines the scope of the standards committees. Technical committees are set up on the principle that all interests be adequately represented, whereas Vietnam still has only sporadic involvement of industry and the private sector in its decision making processes.

Existing standards are reviewed every five years in Thailand. Standards are also based as far as possible on international standards. The Thai standards system has an information system which is electronically accessible, with continually updated lists of standards (compulsory and voluntary) and work programs.

In many respects therefore, Thailand is "ahead" of Vietnam in terms of technical capacity and institutional structures. Both countries, however, are now reaching a stage where regional and international trade agreements will cut off certain avenues for trade protection, and STRs will come under pressure to become new barriers to trade.

7. How APEC's Agenda in Standards Relates to Trade Prospects in Vietnam and Thailand

In the APEC Declaration on a Standards and Conformance Framework, APEC Ministers recognised the importance of closer technical cooperation among APEC members on standards and conformance issues and agreed upon the following objectives for this cooperation:

1. to reduce the negative effects on trade and investment flows in the region due to the differing standards and conformance arrangements;
2. to foster and promote international standardization in furtherance of trade through active participation by APEC members in the development of international standards and conformity assessment practices;
3. to facilitate the further development of open, market-driven interdependence in the Asia Pacific region, while making the most efficient possible use of available resources, by:
 - encouraging greater alignment, harmonisation and consolidation of members' standards and conformance practices with international standards and practices
 - liaising more closely, and developing greater consistency of approach to standards and conformance issues among APEC members in relevant and international bodies
 - making progress on developing mutual recognition of conformity assessment in the region.

The exchange of information on standards, technical regulations and conformity assessment practices and requirements was considered critical to the fulfillment of these objectives.

APEC represents the largest regional grouping formed to date, with members representing about 24 percent of world trade. The APEC goal to achieve open trade in the Asia Pacific region by 2010 includes a priority focus on trade liberalisation and facilitation. This part of the APEC work program has assumed greater importance over time, in part due to the fact that consensus agreements on lowered tariff barriers and investment liberalisation has proven particularly difficult to achieve. The APEC work program on standards and technical barriers includes obligations under Collective Action Plans (CAPs) and also Individual Action Plans (IAPs). Aspects of the IAPs for Vietnam and Thailand are provided in Appendices 1 and 2 respectively.

8. Conclusion and Recommendations

The challenge

Reform and modernisation of standards systems, and of the infrastructure related to technical regulations, is a complex and important challenge for developing countries in the Asia-Pacific Economic Co-operation (APEC) region. This paper surveyed the general nature of the challenge, and looked at Vietnam and Thailand as case studies.

This challenge involves both technical and policy considerations. The technical challenge includes, firstly, changing domestic standards and technical regulations (STRs) to become consistent with international norms. Secondly, it involves introducing completely new STRs as applied internationally. Thirdly, the efficient, consistent, and effective implementation of STR-related services presents another set of problems.

Cutting across these design and implementation considerations are issues relating to the balance between mandatory and non-mandatory STRs, and the balance between the role of the state and of non-government organisations, and finally, the balance between STRs compliant to international norms and those that are not.

The policy challenge has national and international aspects. The national policy challenge is to put in place systems of design, monitoring and review that prevent STRs evolving into barriers to trade, or to prevent new trade barrier STRs being introduced. This aspect, of course, requires an explicit methodology and institutionally embedded process for evaluating the objectives and impact of any given STR. A simple methodology of cross-country indicators and indexes should be developed.

Further, in the scramble to meet international norms, there may be a tendency in developing countries to neglect their role in defining and enforcing such norms. The “international policy challenge” is therefore to play an active role in the international arena. This requires certain capacities and an appropriate commitment of resources to international policy and dispute resolution forums.

Vietnam and Thailand

These two APEC countries have already made significant progress in the 1990s to reform standards and technical regulations to meet international norms. The nature and size of this “redesign” challenge has been greater for Vietnam. Vietnam is an economy in transition from central planning to markets. This also involves a transition from Soviet bloc trading and standards norms to those of the international community. That is a considerable technical task for which more international assistance would be warranted, although progress has already been impressive.

Implementation of STRs does, however, continue to suffer from institutional capacity weaknesses in both countries. To what extent these weaknesses are due to purely technical constraints (e.g. lack of technicians) or to more general economy-wide problems (e.g. poorly enforced commercial legal system, or a lack of industry demand) remains unclear. A detailed study to identify technical capacity constraints and an evaluation as to whether these are binding constraints to improved implementation of STRs would be useful⁴.

In both countries, but particularly in Vietnam, the role for non-government organisations could be expanded. This is not something that can happen quickly. Professional non-government organisations (such as legal, auditing, accounting, valuation, etc.) are often weak in developing countries due to a lack of supporting institutions, civil society, “social capital” or what may more generally be referred to as “weak states”. Developing countries generally have “weak states” in the sense that they have trouble enforcing regulations, collecting taxes, and in minimising corruption. Control of the economy is, in practice, more decentralised, and power and authority more frequently abused. Consequently, the developing country governments often find themselves burdened with responsibilities that can be handed over to non-government organisations in developed countries.

⁴ That is, if improved technical capacity would actually lead to improved implementation of STRs. It may be, for example, that technical capacity on its own is insufficient, and must accompany general legal and information policy reforms.

“Weak state” problems create a paradox. In general they mean that taxes and regulations remain simple, yet in some areas they become unjustifiably complex. This may not seem obvious, but a comparison of, say, the bodies of commercial law in Thailand and Vietnam to those of Australia and the USA would make the point⁵. The legal and regulatory web in developed economies is vastly more complex. To collect government revenues, for example, developing economies have great difficulty enforcing complex regulations, such as value-added and personal taxes, and therefore rely more on easier ones, such as taxes on trade. Similarly, as our case studies have shown, to provide protection, developing countries employ crude instruments, such as quotas and bans, rather than complex standards and technical regulations.

Yet the paradox is that some regulations are much more complex in developing countries. Vietnam, for example, has 26 different tariff rates. More importantly, the tariff schedule is complex and constantly changing. The schedule in February 1998 identified 3,163 separate items (CIE 1998, p.39), and within any one item there may be many relevant minimum import prices applied. Vietnam's trade-related legal framework is not so much "in transition" as continually on the boil. Surcharges, tariff rates, tariff exemptions, finance measures, quotas, and import stamping are all changed or modified quite regularly, and at least every year. A “weak state” cannot stop the abuse of regulatory authority at lower levels. Complexity enhances bureaucratic control and is a product of rent-seeking games. Thus, within a general picture of an “under-regulated” economy, where informal mechanisms are therefore much more important than in developed economies, we also find pockets of regulatory complexity where rent-seeking games are being played.

What are the implications for STRs in developing countries? Firstly, it seems that STRs are mostly not subject to rent-seeking games (unlike in developed countries). This is because such games focus around blunter and more profitable trade policy instruments, such as bans, quotas and tariffs. These instruments are simpler and generate revenues for either the government or for those with control rationed imports. In developed countries these options for “fine tuned” protection have been progressively closed off. Tariff rates, for example, have been lowered and

⁵ We may also consider employment, health and building regulations, which are all more less complex in theory (and certainly in practice) in developing countries.

the number of rates are typically less than ten. Developed countries therefore become subject to interest group pressures to utilise STRs (and anti-dumping) for targeted protection.

Thus progress in reform and modernisation of standards systems in Thailand and Vietnam is “genuine” in the sense that it is focused on welfare-enhancing trade creation through lowering the transaction costs of trade. As such, it is a process that deserves technical support. It is also a policy opportunity. Before pressures mount to use STRs for protection, regulatory review mechanisms can be put in place to make such use of STRs more difficult. For example, STRs not compliant to international norms could be subject to reviews of their impact and objectives every three to five years. Mandatory regulations could automatically be abolished unless they pass such a review process.

Is it too late? Already in Thailand anti-dumping legislation has gone through two revisions, and Vietnam is drafting similar legislation. As APEC, AFTA and the WTO memberships abolish the old blunt trade policy options for protection, STRs and anti-dumping games become increasingly attractive. A leading Vietnamese economist provides insight into contemporary thinking on this issue:

“Increasing the tariff rates is only a temporary [protectionist] measure. They cannot be long-term solutions as we are due to join AFTA and WTO... We’ve got to think about non-tax barriers, the methods that are being used by a number of countries. It can definitely work for us.” (Le Dang Doanh, Vietnam Investment Review July 6, 1997)⁶

Findings and conclusions

Understanding the trade policy regime of any particular country is a difficult task, of which, understanding STRs is possibly the most challenging aspect. There is, however, “no short-cut to hard thinking and yet harder and patient analysis of countries in depth” (Srinivasan & Bhagwati, 1999. P.7).

Aggregate quantitative approaches are hampered by their need for transparency through numbers. Case studies, surveys and interviews are required to reveal the subtle nuances of

protection through STRs and other non-tariff barriers. Such “patient analysis” is important. Trade liberalisation involves much more than reducing tariff rates. It also involves “subtler aspects, such as how reliably tariffs are collected, how frequently changes are made, how sensitive those changes are to lobbying and how accessible and distortionary safety-valve protection is. Clarity, predictability and the absence of official discretion are probably just as important as whether the tariff is 5 percent or 15 percent” (Winters 2000, p.16). In this context, transparent, fairly implemented and rarely changing STRs are important, but so also are support services such as customs administration, banking, insurance, communications and transport, and port efficiency. “These are more difficult to reform [and measure the impact of] than mere tariff rates, but they are probably becoming more important as tariffs fall and global supply chains come to dominate production and trade” (Winter 2000, p.16).

Further, one supply-side constraint identified as being responsible for the inadequate response of exports in developing countries to structural adjustment programs is the lack of intermediate institutions needed to meet the quality requirements demanded on export markets such as quality control, testing and certification for compliance with standards of export markets. (OECD Working Paper, 1997).

Although important, the precise impact of STRs as non-tariff barriers remains elusive. After all, the targeted and non-transparent nature of STRs is a fundamental reason why they can evolve into non-tariff barriers to trade. In design or in implementation, STRs can easily become trade diverting rather than trade creating.

Finally, given the “genuine” nature of the efforts to modernise STRs in developing countries like Vietnam and Thailand, and the evident capacity weaknesses, there seems to be a strong argument for technical assistance through APEC or donor channels. The first step in such assistance would be to evaluate the precise nature of the capacity weaknesses, and then to conduct a cost-benefit analysis of strengthening them. A fundamental question such an evaluation must address is whether strengthened institutional capacity alone can enhance trade. Non-mandatory standards, for example, mean that demand considerations are also important.

⁶ Professor Doanh is Director of the Central Institute for Economic Management, in the Ministry of Planning and Investment.

APPENDIX 1: STAMEQ MEMBERSHIP

International Organisations

<i>Organisation</i>	<i>Since</i>	<i>Membership Type</i>
International Standardisation Organisation (ISO)	1977	Full member
International Electrotechnical Organisation (IEC)	1996	Subscriber member
C. Organisation Internationale de Metrologie Legale (OIML)	1994	Associate
D. International Laboratory Accreditation Cooperation (ILAC)	1992	Full member
E. Codex Alimentarius Committee (CAC)	1989	Full member
F. European Article Numbering-International (EAN)	1995	Full member

Regional Organisations

<i>Organisation</i>	<i>Since</i>	<i>Membership Type</i>
Pacific Area Standards Congress (PASC)	1992	Full member
B. Asia Pacific Laboratory Accreditation Cooperation (APLAC)	1995	Full member
C. Asian Pacific Metrology Program (APMP)	1995	Full member
D. Asian Pacific Quality Organisation (APQO)	1994	Full member
E. ASEAN Consultative Committee for Standards and Quality (ACCSQ)	1995	Full member
F. Asian Pacific Economy Cooperation – Sub-committee for standards Conformance (APEC-SCSC)	1995	Full member
G. Technonet Asia (TA)	1993	Full member
H. Asian Productivity Organisation (APO)	1996	Full member
I. Asian Pacific Legal Metrology (APLMF)	1996	Full member

Source: TCVN Website (www.tcvn.gov.vn)

APPENDIX 2: Highlights of Vietnam's Individual Action Plan 1999 (APEC)

I. TARIFF Continue to reduce the tariff rates to achieve APEC's goal of free trade in 2002.

II. NON TARIFF MEASURES Clarify the goods subject to automatic and non-automatic licensing requirement.
Review existing non-tariff measures in Vietnam and work out the schedule for elimination of inappropriate measures.

V. STANDARD AND CONFORMANCE Consider the possibility of harmonizing standards for 4 priority areas of electronic appliances, food labeling, plastic and rubber products.
To participate in developing and signing framework agreement on mutual recognition and continue to implement ISO 14000 and ISO 9000.
Develop the Vietnam's set-off descriptor in the field of standards, measurement and quality.

VI. CUSTOMS PROCEDURES Review the regulatory documents in order to create a more simplified legal environment for customs procedures.
Fulfil necessary procedures for the application of customs valuation in accordance with WTO.

X. DEREGULATION Continue the equitisation progress of State-owned enterprises
Review the documents on customs procedures in order to facilitate the customs clearance procedures.
Progressively reduce non-tariff barriers to trade.

XI. RULES OF ORIGIN Promulgate rules of origin of Vietnam in the form of a piece of legislation
Implement the WTO agreement on rules of origin.

XIV. INFORMATION GATHERING AND ANALYSIS Continue to improve the gathering of foreign trade statistics in accordance with international standards.
Compile and publish sectoral statistic books in more detail in order to have information of Vietnam disseminated in regional and international publications.

APPENDIX 3: Highlights of Thailand's Individual Action Plan 1999 (APEC)

<u>I. TARIFF</u>	In 1999, the Thailand Government appointed a Tariff Restructuring Committee to study tariff rates and structure in order to meet international commitments for a more open and competitive market while at the same time contributing to the development and recovery process of the economy. As a result, Thailand has recently announced an extensive tariff reform package that includes tariff reduction and elimination covering 639 tariff lines, which mainly focuses capital goods and raw material inputs.
<u>II. NON TARIFF MEASURES</u>	This year, Thailand has further increased the quantity of imported soybean, soybean cake, skimmed milk powder and palm oil above the quantity committed under the WTO Agreement.
<u>V. STANDARD AND CONFORMANCE</u>	Thailand has further aligned existing standards with relevant international standards for electrical and electronic appliances and machinery and has participated in the APEC Food MRA and the MRA on Automotive products with Australia.
<u>VI. CUSTOMS PROCEDURES</u>	Thailand has recently implemented the Electronic Data Interchange at the Bangkok Port Import Clearance Bureau, the Laem Chabang Customs House and at the Bangkok International Airport Customs House.
<u>VII. COMPETITION POLICY</u>	Thailand has recently promulgated its new Competition Act to regulate unfair business practices and to protect consumers in line with international competition standards.
<u>VIII. GOVERNMENT PROCUREMENT</u>	The Government has amended the Regulations of the Office of the Prime Minister on Procurement with improved transparency and fairness. The Government is also in the process of establishing a procurement database and is working closely with NECTEC on this issue.
<u>IX. DEREGULATION</u>	The Corporatisation Act has been approved by the Parliament and is presently under the process of implementation.
<u>XI. MOBILITY OF BUSINESS PEOPLE</u>	Thailand has undertaken the following steps to enhance the mobility of business people: Revise the Law on Immigration to allow the issuance of a Multiple Entry Visa with validity of 3 years for APEC business people Set up APEC Business Immigration Lanes at Bangkok International Airport for both arrivals and departures.
<u>XII. IMPLEMENTATION OF THE URUGUAY ROUND OUTCOMES</u>	Thailand will be eliminating local content requirements by 31 December 1999 under TRIMs. The amended Patent Act will come into force in September 1999. The Trademark Act is to be completed by 1999. Industrial tariffs reductions covering 854 items have been carried out in 1999.

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Dr. Vu Van Dien
Director
STAMEQ, Vietnam
2. 17 September, 2000
Mr. Tuan Anh
Expert
Vietnam Productivity Centre

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