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STANDARDS, NORMS AND REGULATIONS IN INTERNATIONAL TRADE, WITH SPECIAL REFERENCE TO THEIR IMPACT ON COUNTRIES IN TRANSITION

THE ROLE OF TECHNICAL HARMONIZATION IN REGIONAL INTEGRATION

Note by the secretariat

This paper constitutes one of the chapters of the study to be submitted for discussions at the second session of the Committee for Trade, Industry and Enterprise Development in June 1998.

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THE ROLE OF TECHNICAL HARMONIZATION IN REGIONAL INTEGRATION

Recent years have witnessed efforts to liberalize and harmonize international trade. Through the implementation of trade agreements, the World Trade Organization (WTO) has become a driving force behind this process by encouraging its members to offer tariff concessions, liberalize quotas and remove other trade restrictions, including non-tariff barriers. The institutional framework to do this has been provided by organizations which have helped establish trade policies and helped provide a strong impetus to the liberalization process. Internationally, these include the predecessor to the WTO, the General Agreement on Tariffs and Trade (GATT), and the United Nations Conference on Trade and Development (UNCTAD); regionally, they consist of customs unions, free-trade areas, and organizations which promote regional technical harmonization activities. The regional groups are APEC, EU, ARSO, COPANT, EFTA, OECD, NAFTA, and CIS. The reasons behind the integration of each of these groups are numerous. In many cases, one of the principal reasons is that of technical harmonization. For the purposes of this paper, the role played by technical harmonization in encouraging regional integration will be examined. Also to be examined will be the current objectives and activities of each group with regard to achieving technical harmonization within the region.

I. ASIA-PACIFIC ECONOMIC COOPERATION (APEC)

- 2. The Asia-Pacific Economic Cooperation (APEC) was established in 1989 in response to the growing interdependence among Asia-Pacific economies. Begun as an informal dialogue group, APEC has since become the primary regional mechanism for promoting open trade and economic cooperation. APEC now includes all the major economies in the region, as well as some of the most dynamic economies in the world. In 1995 APECs 18 member economies had a combined gross domestic product of over \$13 trillion (US). This represents approximately 55 percent of total world income and 46 percent of global trade.
- 3. Leaders of APEC economies initially recognized that by supporting an open, international trading system, and the reduction of trade and investment barriers, that they would share the benefits of economic growth through higher incomes, free flowing goods, services, capital and investment. One of APEC's key objectives was therefore the development of appropriate technical infrastructure that would in turn, encourage harmonization of technical requirements.
- 4. The principal goal of APEC's Subcommittee on Standards and Conformity Assessment (SCSC) to the Committee on Trade and Investment is to enhance trade between Asia-Pacific member economies by reducing standards-related technical barriers and by building the appropriate infrastructure for facilitating trade. Priority areas targeted for technical infrastructure development and harmonization include:
 - National standards for physical measurement and a network of accredited calibration laboratories with traceability to primary standards;
 - A network of accredited testing and measurement laboratories;
 - Accreditation of quality system certifiers; and
 - Accreditation of inspection bodies and certification of inspection personnel.

- 5. In 1995, the SCSC made a policy decision to rely on specialist regional bodies (SRBs) to develop the technical infrastructure within the region, rather than develop new bodies. These bodies include the following: the Pacific Area Standards Congress (PASC); the Asia Pacific Laboratory Accreditation Cooperation (APLAC); the Asia-Pacific Legal Metrology Forum (APLMF); the Asia-Pacific Metrology Program (APMP); and the Pacific Accreditation Cooperation (PAC).
- 6. APLAC is a group of more that 25 laboratory accreditation bodies in 18 Asia-Pacific economies. APLAC members recently signed an MRA to recognize accreditation in the fields of testing and calibration. The MRA is expected to enhance confidence in the procedures of member accreditation bodies, thereby paving the way for increased regional and international trade. Under the MRA, a product tested by a lab accredited by a member body need not be retested in another member's economy.
- 7. PASC helps identify opportunities for national standards developers to comment and participate in the development of regional positions and sharing of technical input for international standards development and conferences. Members of PASC coordinate regional input regarding standards development for technical groups which report to the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).
- 8. APLMF seeks to promote trade through the harmonization of legal metrology regulations in the region under the International Organization of Legal Metrology (OIML) and to organize the infrastructure of legal metrology in its member economies. Discussions are currently underway to develop an MOU between APLMF members.
- 9. Current activities of the APMP include intercomparison studies of chemical measurement capabilities, the results of which will be compiled with other regions' studies, including those of the North American Metrology Agreement (NORAMET).
- 10. The Pacific Accreditation Cooperation seeks to promote the worldwide acceptance of certificates of conformity issued by certification bodies accredited by PAC members. To accomplish this, PAC is seeking to establish a multilateral mutual recognition agreement between accreditation body members of PAC which will be recognized by IAF. To facilitate recognition of the MLA, PAC is using procedures approved by the IAF to develop the MLA.

11. Future goals of APEC include:

- To reduce the negative efforts on trade and investment flows in the region due to differing standards and conformance arrangements;
- 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;
- 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 of members' standards with international standards;

- Liaising more closely, and developing greater consistency of approach to standards and conformance issues in relevant international bodies;
- Making progress on developing mutual recognition of conformity assessment in the region.

II. EUROPEAN UNION

- 12. The European Economic Community (EEC) was established after World War II with the ultimate goal of creating "an ever closer union among the peoples of Europe". By 1986, the Community included twelve members. Today, the now 15 member European Union (EU) represents the largest market in the world. While the original goal was to promote political integration through economic unity, the former goal has not yet been fully realized while progress in the latter area has made more significant strides. EU member countries have established a customs union, in which all tariffs and other trade restrictions between members have been abolished and a common tariff against non-members has been established.
- 13. One of the original objectives of the EU was to promote balanced and sustainable economic and social progress. Recognizing that technical harmonization within the region and on an international level can promote economic growth, the EU developed a "New Approach" to technical harmonization. The goal of the "New Approach" is to streamline technical harmonization and the development of standards for certain product groups. Under the New Approach, directives for the harmonization of standards by member States are limited to essential safety or other performance requirements in the general public interest. The technical details of how to meet these requirements are left to manufacturers who self-certify products, the three regional European standards organizations (CEN, CENELEC and ETSI), and government appointed product certification bodies.
- 14. In addition to implementing a new approach on technical harmonization and standardization, the European Commission has developed a policy on harmonized rules and procedures for conformity assessment called "The Global Approach to Certification and Testing". This policy aims to establish conditions whereby mutual recognition agreements (MRAs) can be implemented that will permit the recognition of a notified body's test results by all of the EU member States or the acceptance of test results between two Governments.
- 15. The three principal organizations that oversee technical harmonization activities in the EU are the European Committee for Standardization (CEN), the European Committee for Electrotechnical Standardization (CENELEC), and the European Telecommunications Standards Institute (ETSI).

II.A. European Committee for Standardization (CEN)

16. The European Committee for Standardization (CEN), established in 1961, is responsible for creating voluntary European standards (ENs) in all areas except for those of electrotechnical and telecommunications. The aim of CEN is to eliminate trade barriers resulting from differing national technical standards in order to stimulate industry and trade and promote safety and efficiency through the creation and harmonization of European standards.

17. CENs primary areas of activity are mechanical engineering, building and civil engineering, health technology, information technology, biology and biotechnology, quality, certification and testing, environment, workplace health and safety, gas and other energies, transport and packaging, consumer goods, sports, leisure, food, materials (iron and steel), and chemistry.

II.B. European Committee for Electrotechnical Standardization (CENELEC)

- 18. CENELEC is an international association established in 1972 whose aim is to produce a single set of harmonized electrotechnical standards in Europe including those that support EU directives.
- 19. CENELEC develops standards in the field of electrotechnical and electronic engineering where no International Electrotechnical Commission (IEC) standards are available. It also aims to expedite the publication and adoption of international standards. CENELEC works very closely with IEC at the international level and maintains an open exchange of information.

II.C. European Telecommunications Standards Institute (ETSI)

20. The mission of ETSI is to create telecommunications standards for improving communications between the member countries of the European Union. ETSI was established in March 1988 and currently represents one of the largest international technical associations in the field of telecommunications. ETSI develops standards in the area of public and private telecommunications systems and equipment, local area networks, and other electronics equipment for government and consumers.

III. <u>AFRICAN REGIONAL ORGANIZATION FOR STANDARDIZATION (ARSO)</u>

- 21. Established in 1977, the African Regional Organization for Standardization (ARSO) currently has 23 members. ARSO members have five principal objectives:
 - To promote and coordinate standardization, quality control, certification marking and metrology practices in Africa;
 - To develop African Regional Standards for products of interest to Africa;
 - To promote social, industrial, and economic development and provide consumer protection and human safety by advocating and establishing activities concerning standardization in Africa;
 - To operate as a regional clearinghouse for information on standards and technical regulations; and,
 - To promote the harmonization of the views of members and promote their contribution and participation at the international level in the field of standardization and related activities.
- 22. ARSO develops African Regional Standards (ARS) in the following nine sectors: general standards, agriculture and food products, building and civil engineering, mechanical engineering and metallurgy, chemistry and chemical engineering, electrotechnology, textiles, transport and communications, environmental protection and pollution control. ARSO also organizes training programs for personnel of member states engaged in standardization work and

operates a network of documentation and information systems on standards and technical regulations in Africa.

23. ARSO is currently in the process of adopting a regional certification marking scheme to assure the quality of African products. The scheme would include a regional laboratory accreditation program. In the future, it will also begin a regional metrology program aimed at improving the measurement capabilities of member states and sharing of metrology facilities through a network of testing, metrology, and instrumentation centers.

IV. PAN AMERICAN STANDARDS COMMISSION (COPANT)

- 24. The Pan American Standards Commission originally formed in 1961 as the Pan American Technical Standards Committee (COPANT). It formed based on the recognition that each country should have a standardization agency and that there should be one group with the responsibility of coordinating the standards activities of those agencies.
- 25. One of the primary objectives of COPANT is to promote the development of technical standardization and related activities with the aim of promoting industrial, scientific and technological development in its member countries.
- 26. Specific goals of COPANT are to:
 - Devise standards of interest to countries in the region that have not been developed by recognized international agencies or, if so, do not correspond to their particular needs;
 - Encourage coordination among COPANT members to facilitate harmonization of their technical standards;
 - Ensure increased utilization and application of international standards in business and industry;
 - Represent COPANT members in other international fora with similar goals or in regional and international organizations requiring technical standardization support to fulfill their economic, scientific or technological functions;
 - Encourage and facilitate an exchange of information between COPANT members and the international system;
 - Promote technical education and training in standardization areas and in related activities;
 - Encourage the development of certification systems based on international criteria;
 - Promote the harmonization of certification systems;
 - Ensure the harmonization of policies and technical positions of member institutes with international policies and technical positions.
- 27. Future objectives of COPANT with regards to technical harmonization activities include the following:
 - Achieve greater participation in ISO and IEC TC's when such efforts correspond to explicit needs of the region;
 - Encourage the development and adoption of relevant international standards;
 - Implement all standardization work already accomplished; and

- Maintain relationships with the international and regional bodies whose activities are related to the use of Pan American standards.

V. EUROPEAN FREE TRADE ASSOCIATION (EFTA)

- 28. The European Free Trade Association (EFTA) was originally conceived of as a free-trade area for industrial goods with special provisions for trade in farm products. Unlike the EU countries, the seven original EFTA countries did not have a common external tariff but instead were free to determine their own trade policies towards non-member countries.
- 29. Founded in 1960, current members of EFTA include Iceland, Liechtenstein, Norway and Switzerland. The objective of EFTA is to remove trade barriers between its members and to uphold non-discriminatory practices in world trade. Since its original founding, EFTA has become the principal means for members to achieve free trade with members of the EU. This is accomplished through an agreement called the European Economic Area (EEA). The EEA views EFTA members as part of the EU as far as trade relations are concerned. However, while one of the central concepts of EFTA is that all the countries in the area should have the same rules and conditions of competition, under the EEA, EFTA states do not have decision-making powers.
- 30. EFTA members are also guided by the principles outlined under the Stockholm Convention. The Convention's primary aim was to eliminate import duties and quantitative restrictions on industrial goods over a six-year period. Rules of origin were implemented and agreements were established between such key areas as customs and administration. The Convention also created general principles in areas such as state aid, public procurement, and restrictive business practices where the liberalization of trade might otherwise be obstructed.
- 31. Under EFTA, the Committee on Technical Barriers to Trade (TBT) oversees notifications on technical regulations and cooperation and policies to facilitate trade by technical and legislative means. In addition, contracts are in place with CEN and CENELEC to prepare European standards. The EFTA Convention on the Mutual Recognition of Test Results and Proofs of Conformity requires members to accept test results and proofs of conformity from competent bodies for designated products without further testing except in special cases. EFTA also pioneered the use of "reciprocal recognition" arrangements, in which a product does not need to be retested in other countries to ensure that it conforms to their regulations. Arrangements are in place for pressure vessels, agricultural machines and gas appliances, among others.

32. EFTA has three principal responsibilities:

- Administration of the EEA Agreement;
- Third country relations, specifically the maintenance of fourteen Free Trade Agreements and six Declarations on cooperation;
- The monitoring and management of relationships between EFTA members on the basis of the Stockholm Convention. In addition, EFTA operates other conventions and oversees the EFTA Industrial Development Fund for Portugal.

VI. ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD

- 33. The precursor to the Organization for Economic Cooperation and Development (OECD) was the Organization of Economic Cooperation (OEEC) which was established after World War II to coordinate European reconstruction plans and distribute aid stemming from the Marshall Plan to recipient European countries. When the reconstruction was complete, the governments involved decided to use the OEEC as a mechanism to help integrate their economies into the rapidly growing international trade system. The OEEC then became known as the Organization for Economic Cooperation and Development (OECD).
- 34. The OECD promotes policies designed to:
 - Achieve the highest sustainable economic growth and employment and a rising standard of living in member countries, while maintaining financial stability, thus contributing to the development of the world economy;
 - Contribute to sound economic expansion in member as well as non-member countries in the process of economic development;
 - Contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations;
 - Evaluate issues which affect economic and social policy, such as agriculture, the environment, education, trade, and foreign investment;
 - Facilitate domestic policy making and more coordinated international practices; and
 - Enhance transparency among members.
- 35. One priority area identified for action by OECD members is that of regulatory reform. The OECD provides policy advice to members undertaking reform projects. Reform is supposed to improve the quality and efficiency of regulations. This often includes improvements in the regulation-creation process as well. The outcomes of regulatory reform include enhanced competition, increased ability of economies to adapt to change and remain competitive in global markets, and increased efficiency.
- 36. The OECD advocates the use of harmonized standards. When harmonization with international standards is effectively carried out, multiple and duplicative regulatory requirements can be overcome. Also, the OECD addresses the health and safety aspects of imported products through the effective design and monitoring of conformity assessment procedures.

VII. NORTH AMERICAN FREE TRADE AGREEMENT (NAFTA)

- 37. Signed into agreement in December 1992, the North American Free Trade Agreement (NAFTA) created the largest free trade area in the world a duty free zone with economic output exceeding US \$8 trillion and nearly 400 million consumers.
- 38. The NAFTA is an agreement that attempts to eliminate tariffs and also removes many of the non-tariff barriers and other trade-distorting restrictions. The Agreement is based on the previous Canada-US Free Trade Area, although coverage under the NAFTA has been expanded to include issues relating to

intellectual property rights, transportation services, and rules against investment distortion. In the area of standards, it specifically requires that standards-related measures be applied in a nondiscriminatory manner to both domestically produced and imported products. The standards development process of NAFTA members is supposed to be open and transparent.

- 39. The NAFTA also recognizes the crucial role of standards and technical regulations in promoting safety and protecting the environment and consumers and human, animal and plant life and health. It provides a framework of rules and cooperative mechanisms for enhancement and compatibility of such measures and ensures that these mechanisms do not operate as unnecessary barriers to trade within the free-trade area.
- 40. Specific objectives of NAFTA include the following:
 - Elimination of barriers to trade in goods and services between members;
 - Facilitation of the cross border movement of goods and services between members;
 - Promotion of conditions of fair competition in the free trade area;
 - Enhancement of investment opportunities in member countries;
 - Provision of an adequate and effective protection and enforcement of each member's intellectual property rights;
 - Creation of effective procedures for the implementation and application of the NAFTA and for its joint administration and the resolution of disputes; and
 - Establishment of a framework for further trilateral, regional and multilateral cooperation to expand and enhance the benefits of the Agreement.

VIII. INTERSTATE COUNCIL FOR STANDARDIZATION, METROLOGY AND CERTIFICATION (ISC)

- 41. Founded in 1992, the Interstate Council for Standardization, Metrology and Certification (ISC) is composed of 12 heads of national standards, metrology, and certification bodies within the Commonwealth of Independent States (CIS). The principal goals of the Council are to:
 - Define rules for interstate standardization work;
 - Define general technical standards and requirements;
 - Define mandatory requirements pertaining to quality of products, processes and services of interstate application;
 - Define uniform methods of testing products;
 - Define units of physical quantities for interstate application, physical constants and standard reference materials; and
 - Define uniform requirements for protection of the environment.
- 42. The Council is also responsible for the following:
 - Development, storage and maintenance of the archive of interstate, international, and regional standards, as well as national standards of foreign countries. The Council also serves as a source of information about those standards for member states (the archives of the Council's interstate standards contains more than 19,000 normative documents; 30%-60% of those are sector-specific and meet international norms and

- requirements; more than 2,900 normative documents were developed and revised during 1993-1997);
- Undertaking international cooperation in standards, metrology, certification and quality;
- Maintenance and evolution of measurement standards and traceability;
- Maintenance of data bases on measuring instruments, standard reference materials and standard reference data on properties of substances and materials; and
- Development of the rules and procedures for the mutual recognition of accredited testing, calibration and measurement laboratories, certification bodies, product certificates, and quality systems.

IX. CONCLUSION

43. The review of the previous entities and regional groups has provided an overview of the role technical harmonization has played in regional integration. Where possible, historical antecedents to regional integration were provided. Current and in some cases, future, objectives with regards to technical harmonization activities for each of the regional groups mentioned were also provided. These regional groups will continue to serve as a means for countries in those regions to better attain the goals espoused by the WTO, principal among them the goal to decrease trade barriers and to increase competition through fair and open trade.