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Technical Barriers to Trade**

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The Role of Good Regulatory Practice in Reducing Technical Barriers to Trade

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ABSTRACT

Good regulatory practice (GRP) has attracted increasing interest in international trade fora as a tool for preventing unnecessary technical barriers to trade (TBTs). Many of the issues addressed by international trade agreements regarding standards are regulatory in nature, with discriminatory, overly restrictive, and non-transparent technical regulations and related testing and certification procedures often serving as significant barriers to trade. Once countries have adopted new technical regulations, it is extremely difficult for them to change them, even when confronted with legitimate challenges by trading partners, because of the typically complex and lengthy regulatory and legislative processes in most countries. Thus, efforts to prevent bad technical regulations from becoming established in the first place using GRP may contribute significantly to the reduction of TBTs. An important GRP tool for reducing the adverse trade impacts of proposed technical regulations, regulatory impact analysis (RIA), uses economic analysis to systematically identify important benefits and costs likely to flow from the adoption of proposed regulations or non-regulatory alternatives under consideration, including their trade impacts. This paper reviews why countries use GRP and tools such as RIA to reduce technical trade barriers. While many countries appear to be effectively incorporating GRP into their regulatory processes, the paper finds that greater focus and improved methodologies are required in assessing the full impact of proposed regulations on international trade.

¹ This paper represents solely the views of the author and is not meant to represent the views of the U.S. International Trade Commission or any of its commissioners. The invaluable assistance of Michael Ferrantino, Katherine Linton, Andrew David, Deborah McNay, Monica Reed, and Judy Bryant is gratefully acknowledged. Please direct all correspondence to Christopher Johnson, Office of Industries, U.S. International Trade Commission, 500 E Street, SW, Washington, DC 20436, telephone: 202-205-3488, fax: 202-205-2018, email: christopher.johnson@usitc.gov.

The Role of Good Regulatory Practice in Reducing Technical Barriers to Trade

Introduction

The World Trade Organization (WTO) has stressed the importance of good regulatory practice (GRP) as a critical tool for preventing unnecessary technical barriers to trade (TBTs) (WTO 2008b, 1). A large portion of the issues addressed by the WTO Agreement on Technical Barriers to Trade (TBT agreement) are regulatory in nature, with discriminatory, overly restrictive, and nontransparent technical regulations² and related conformity assessment procedures³ often serving as significant barriers to trade. Once countries have adopted new technical regulations, it is extremely difficult for them to change them, even when confronted with legitimate challenges by trading partners, because of the typically complex and lengthy regulatory and legislative processes in most countries. Thus, using GRP to help keep bad technical regulations from being established in the first place may contribute significantly to the reduction of TBTs.⁴

The goal of GRP is to produce quality regulation. Technical regulations established under the guidance of GRP serve clearly identified policy objectives, have a sound legal and empirical base, are developed in a nondiscriminatory and transparent way, give rise to benefits that justify their costs, are clear and simple to comply with, are consistent with other regulations and policies, and are compatible with market access, trade, and investment principles at domestic and international levels (OECD 2005, 3). GRP promotes awareness of trade and investment implications in regulatory decision making, encourages trade friendliness in regulatory approaches, and reduces discrimination against or impediments to foreign imports, ownership, and supply.

GRP has evolved from the more narrowly focused regulatory reform policies of the past, which were aimed principally at cutting businesses' costs, to "smart regulation" policies aimed at improving regulatory performance (Shortall 2007, 8; Jacobs 2006, 5). The purpose of GRP is not to reduce protection of health, safety, and the environment, or to undercut other regulatory objectives, but to achieve them in ways less likely to burden business and hamper trade (Jacobs 2007, 5; OECD 2005, 1–2; and WTO 2008b, 1). Or as one economist explains, GRP "does not put into question the underlying objectives of nations' regulations but only the means by which these objectives are attained" (Sykes 1995, 140). In fact, GRP should make regulations more effective in achieving their aims as well as reduce their burdensomeness.

This paper examines the use of GRP to improve economic performance and reduce technical trade barriers. The paper begins by presenting the major principles of GRP and briefly describing its importance for international trade. It then describes international efforts of organizations such as the

² Technical regulations are binding requirements of governments, often referencing standards, to assure that products and services do not present a danger to human health, safety, the environment, consumers, national security, or other objectives. Examples of technical regulations are safety requirements on toys; health warnings on cigarette packages; environmental rules requiring recycling of paper and plastics and limiting motor vehicle emissions; or consumer rules preventing deceptive practices. The main difference between a technical regulation and a standard or technical specification, is that the technical regulation is mandatory (Aorere 2008, 1–4; ISO 2004, 1).

³ Conformity assessment procedures are any procedure used, directly or indirectly, to determine that relevant requirements in technical regulations or standards are fulfilled. Conformity assessment procedures may be voluntary or required by the market, but like technical regulations, they can also be mandatory requirements of government regulatory bodies. Conformity assessment consists of such activities as certification, testing, quality system registration, and inspection (WTO 1995, Annex 1; OECD 2000, 16).

⁴ U.S. trade officials, conversations with Commission staff, September 2008.

WTO, the Organization for Economic Cooperation and Development (OECD),⁵ and the Asia Pacific Economic Cooperation (APEC)⁶ forum to increase the understanding and use of GRP to reduce technical trade barriers. Regulatory impact analysis (RIA), a tool for improving GRP by using economic analysis to examine the potential impacts of proposed technical regulations before adopting them, is then reviewed. The paper concludes with a review of studies evaluating the effectiveness of GRP and tools such as RIA in reducing trade barriers. While the study results are generally positive, they suggest that more focus and better methodologies are required in assessing the full impact of proposed technical regulations on international trade before they are adopted. Table 1 summarizes the major findings of the paper:

TABLE 1 Summary of major findings

Topics	Findings
Major principles of GRP	The following principles of GRP help reduce TBTs by ensuring good regulatory practices: regulatory transparency and openness, nondiscrimination, avoidance of unnecessary trade restrictiveness, harmonized standards and regulations, high quality regulations, mutual recognition, and regulatory coordination.
Efforts of international organizations to promote and assess GRP	The WTO Committee on Technical Barriers to Trade has highlighted the importance of GRP in reducing TBTs. The OECD and APEC have established an integrated GRP framework and tools for assessing the implications of regulatory practice for international trade and market access.
RIA	Using RIA, countries may reduce or avoid proposed technical regulations' adverse effects on trade by examining their potential effects before adopting them and recommending regulatory solutions that have the least restrictive impact on trade and investment.
GRP and trade	The ability of GRP to reduce TBTs can be maximized only when the impact of all trade factors is clearly taken into account in nations' regulatory policies.
Conclusion	While much progress has been made in the United States and among its trading partners to improve the regulatory decision-making process through the use of GRP, more focus and better methodologies are needed to assess the full trade impact of proposed technical regulations before they are adopted.

Source: Compiled by Commission staff.

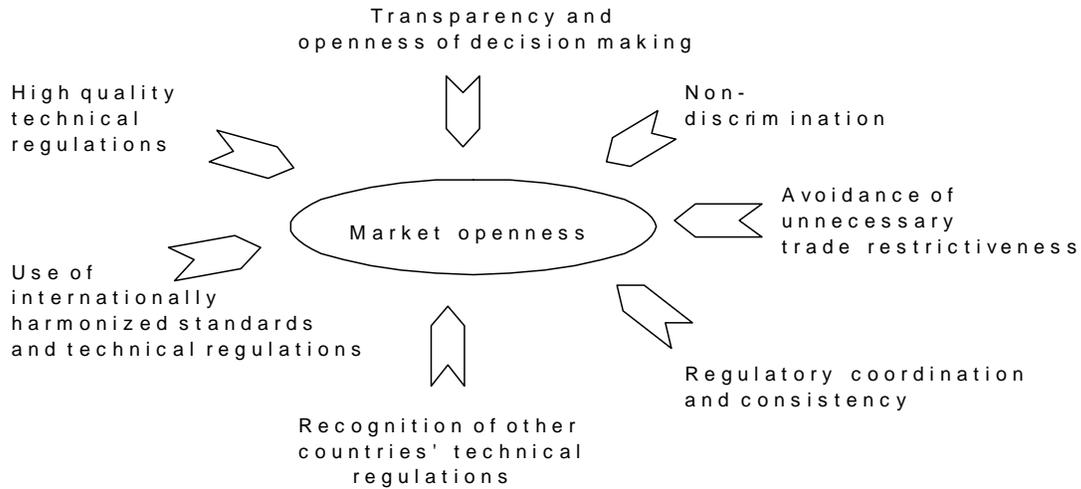
⁵ The 30 member countries of OECD are Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States.

⁶ APEC consists of 21 economies that seek to liberalize trade and establish economic cooperation: Australia, Brunei Darussalam, Canada, Chile, People's Republic of China, Hong Kong, Indonesia, Japan, Republic of Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Chinese Taipei, Thailand, and the United States.

Major Principles of GRP

As GRP policies have gained popularity in a number of developed and developing countries, some common principles have emerged as essential elements. These principles include (1) transparency and openness of regulatory decisionmaking, (2) nondiscrimination, (3) avoidance of unnecessary trade restrictiveness, (4) use of internationally harmonized standards and technical regulations, (5) high quality technical regulations, (6) recognition by countries of others countries' regulatory measures, and (7) regulatory coordination and consistency (Czaga 2004, 8–14) (figure 1). This section discusses each of these principles and their relevance in addressing TBTs.

FIGURE 1 Major principles of good regulatory practice



Source: OECD 2004, 11.

Transparency and Openness

Transparency and openness in countries' regulatory processes are fundamental to ensuring the development of regulations that are effective in achieving legitimate regulatory objectives while minimizing their impact on international trade (Raj 2005, 1–5). Promoting transparency, predictability, and public participation in the development of regulatory and policy decisions includes making information and regulations accessible to all domestic and foreign persons and businesses requesting them, providing a meaningful opportunity for foreign stakeholders to comment before a proposed measure is adopted, and opening regulatory and rule-making processes to all interested parties (Shortall 2007, 13) (box 1).

BOX 1 Transparency in rulemaking in the United States

The 1946 Administrative Procedure Act (APA) established a legal right for citizens to participate in rulemaking activities of the federal government on the principle of open access to all. It sets out the basic rulemaking process to be followed by all agencies of the U.S. Government. The path from proposed to final rule offers affected parties many chances to participate. At a minimum, the APA requires that in issuing a substantive rule (as distinguished from a procedural rule or statement of policy), an agency must:

1. Publish a notice of proposed rulemaking in the Federal Register. This notice must set forth the text or the substance of the proposed rule, the legal authority for the rulemaking proceeding, and times and places for public participation. Published proposals also routinely include information on appropriate contacts within regulatory agencies.
2. Provide all interested persons — nationals and non-nationals alike — an opportunity to participate in rulemaking by providing written data, views, or arguments on a proposed rule. This public comment process serves a number of purposes, including giving interested persons a chance to deepen the agency's knowledge of the subject matter of the rulemaking, challenge the factual assumptions on which the agency is proceeding, and show in what way such assumptions may be in error.
3. Publish a notice of final rulemaking at least 30 days before the effective date of the rule. This notice must include a statement of the basis and purpose of the rule and respond to all substantive comments received.

Exceptions to the 30-day rule are provided for in the APA if the rule makes an exemption or relieves a restriction, or if the agency concerned makes and publishes a finding that an earlier effective date is required "for good cause." In general, however, exceptions to the APA are limited and must be justified. The theory of this process is that it is open to all persons, domestic and foreign, rather than being based on representative groups. This distinguishes the method from those used in more corporatist models of consultation, and also from informal methods that leave regulators considerable discretion in who to consult.

The American system of notice and comment has resulted in an extremely open and accessible regulatory process at the federal level that is consistent with international good practices for transparency. Its effect is to increase the quality and legitimacy of policy by ensuring that special interests do not have undue influence.

Sources: U.S. Administrative Procedure Act (APA), 1946 ; and APEC and OECD 2008, 9.

While easy access to regulatory information is important for domestic companies, it is critical to foreign firms, which may be unfamiliar with the economic, cultural, and regulatory environment of a particular market (Czaga 2004, 8–14). Indeed, international trade depends on such transparency. As one economist

puts it, “it is important for traders to know what the rules are and where to find them” (Kleitz 2006). To succeed in an overseas venture, firms must have information on the specific rules, regulations, and other requirements to help them understand the risks, constraints, and other factors that they will face if they enter the market (box 2). Such information is equally important to them once they are operating there. Other important benefits of open and transparent regulatory processes are that they give firms more time and flexibility to adjust to regulatory changes and may help to increase firms’ compliance rates (Czaga 2004, 8).

BOX 2 Improving transparency by placing regulatory information on the Internet

Increasingly, countries are placing regulatory information, including regulatory proposals for comment, on the Internet. Following are some examples of the use of electronic dissemination of regulatory information in various countries:

Denmark—Information technology is used as part of an effort to reduce administrative burdens for business. Legislation and technical regulations are published in the official publication, *Lovtidende*, which is also available on the Danish parliament’s Web site. Denmark also publishes business impact assessments of regulations on the Internet.

European Union—The European Commission has a one-stop Internet shop for commercial interests that provides general information on single market rules and on key issues such as technical standards and public procurement. It also contains links to a number of member state information centers that provide information on the application of standards, technical regulations, conformity assessment procedures, and quality initiatives in Europe.

Japan— Japanese government ministries and agencies maintain Internet sites where the public can find information on important regulations and policies.

Mexico—The Federal Regulatory Improvement Commission (COFEMER) has developed online systems for most of its regulatory programs. Almost all regulatory impact assessments made by Mexican federal agencies are submitted online.

Korea—Has initiated a series of measures to ensure its laws are publicly accessible, and makes all laws and technical regulations available on the Internet via the Ministry of Legislation’s homepage. The Korean regulatory reform committee has compiled an extensive list of regulations in force, which can be searched by the general public.

United States—Makes active use of the Internet to communicate regulatory information, including posting proposed regulations on the Internet. The daily Federal Register and the Code of Federal Regulations are both available for free. An electronic, one-stop site, <http://www.business.gov>, provides practical assistance to U.S. and foreign businesses through an advanced search function to locate federal information. Meanwhile, Regulations.gov facilitates public participation in the federal regulatory process by improving the public’s ability to find, view, and comment on federal regulatory actions.

Sources: Compiled by Commission staff from Rodrigo 2005, 12; and U.S. Office of Management and Budget 2009 Web site, <http://www.regulation.gov>.

The openness of countries’ regulatory rule-making processes to all interested domestic and foreign parties also improves regulatory efficiencies while lessening the likelihood that ineffective or discriminatory regulations will result in technical trade barriers. Moreover, when all domestic and foreign stakeholders can contribute to the regulatory process via formal and informal consultations their involvement can

improve the quality and effectiveness of technical regulations, and may help ensure market openness (WTO 2008b,1; Raj 2005, 1–5; Czaga 2004, 8–14). Broad participation allows regulatory authorities to benefit from the knowledge of a wide range of industry and stakeholder expertise that can help improve regulatory efficiencies, create regulations that are less restrictive, and accomplish their intended objectives in more effective ways. Furthermore, as once expert notes, the participation of foreign stakeholders may “assist in disseminating international best practices and provide early warning of any trade dispute that may arise as a consequence of the regulation” (Czaga 2004, 8). Finally, wide participation in the rule-making processes may even increase the enforceability of adopted regulations by increasing their legitimacy in the eyes of stakeholders and citizens (European Commission 2009a, 18).

When regulatory regimes lack transparency or are otherwise closed to some stakeholders, the regulatory process becomes susceptible to regulatory capture⁷ by special interests. Regulations favoring some domestic interests over other domestic and foreign interests by definition are discriminatory and thus considered to be TBTs.⁸ Further, they harm the economy of the country that permits such biases to occur by restricting market access and creating economic inefficiencies.

Strict transparency provisions⁹ of the WTO TBT agreement require members to notify the WTO before adopting any proposed new regulations that could potentially impact trade, to ensure that members’ regulatory policies adhere to TBT principles.¹⁰ Such provisions give WTO members the opportunity to review and comment on proposed new regulations and have their views taken into account before regulations are adopted (box 3). Although the TBT procedures do not guarantee that all members’ concerns about proposed regulations will be completely resolved in their favor, there has been broad consensus among WTO members, including the United States, that the TBT provisions have greatly made it easier for all members to learn about and influence the final decisions of the WTO member country regulators before they become final.¹¹

⁷ The theory of regulatory capture was set out by Richard Posner, an economist and lawyer at the University of Chicago, who argued that “REGULATION is not about the public interest at all, but is a process, by which interest groups seek to promote their private interest ... Over time, regulatory agencies come to be dominated by the industries regulated.” Posner 1971, 22–50; 1974, 335–358; and 1975, 807–827.

⁸ Article 2.1.

⁹ WTO TBT Articles 2.9 and 5.6.

¹⁰ Draft regulations should be received by the WTO Secretariat, if possible, 60 days before their formal adoption so as to allow time for other members to make comments. The required process is analogous to the *Federal Register* process in the United States and similar processes in many other developed countries. These require that all new proposed regulations first go through a review and comment process to ensure transparency and careful consideration of the views of all interested parties to decrease the likelihood that ineffective and costly new rules are adopted whose costs outweigh the benefits intended by their original proponents.

¹¹ U.S. government officials, interviews by Commission staff, United States, September 27, 2006; and U.S. and foreign government officials, interviews by Commission staff, WTO TBT Committee Meeting, Geneva, Switzerland, March 21-23, 2005.

BOX 3 Transparency under the WTO TBT agreement

To promote transparency in the regulatory decision-making process, this agreement focuses on ensuring that member countries give all interested parties, including foreigners, the opportunity to review and provide comment on proposed new regulations. For instance, WTO members are required to publish a notice, at an early stage, that they plan to introduce a particular technical regulation (mandatory standard or set of standards) relevant to trade so that interested parties, including private entities, in other member economies can become acquainted with it. Articles 2 and 5 of the TBT Agreement obligate each WTO member to notify and provide opportunity for comment where a proposed technical regulation or conformity assessment procedure may have a significant effect on trade of other members and is not in accordance with an international standard, or where there are no relevant international standards. Draft regulations should be notified to the WTO Secretariat, if possible, 60 days prior to their formal adoption to allow other members time to make comments. However, regulations can be notified ex-post whenever urgent problems of safety, health, or environment protection arise (TBT Articles 2.10 and 5.7).

Source: WTO Agreement on Technical Barriers to Trade.

Nondiscrimination

GRP encourages regulators to ensure that technical regulations are not biased either explicitly or implicitly against the imports of foreign-made products. Nondiscriminatory technical regulations increase market access and trade by allowing products to compete on the basis of price and other competitive advantages rather than on the origin of the products (OECD 2004, 9–10). Conversely, domestic regulations undermine market access and trade when they are biased against goods and services of foreign firms. Discriminatory regulations also lead to fewer choices and higher prices for domestic consumers (OECD 2004, 9–10). The principle of nondiscrimination applies to both national treatment (equal treatment of both national or foreign suppliers) and most favored nation (MFN) treatment (equal treatment among foreign producers).

Avoidance of Unnecessary Trade Restrictiveness

Another important principle of GRP is that countries should use the least trade restrictive means possible to meet their regulatory goals. For example, duplicative testing requirements, and refusal to accept foreign conformity assessment results when they reliably demonstrate compliance with the target country's regulatory requirements, are clearly more restrictive than necessary (Shortall 2007, 9 and 17). Such regulations may needlessly damage market openness and trade, affecting not only exporters to the market in question but economic efficiencies within the market itself. According to one economist, the justification for a least-restrictive means principle is self-evident: "If a given objective can be achieved in a variety of ways, the trading community benefits in the aggregate when the least-cost way is selected" (Sykes 1995, 118). The least-restrictive means principle accepts the underlying objectives of national regulatory policies and asks how best to meet them (Fliess, Gonzales, and Schonfeld, 2008, 9; Sykes 1995, 119). The WTO TBT agreement recognizes the importance of appropriate regulation in its provision that "Technical regulations shall not be more trade-restrictive than necessary to fulfill a legitimate objective, taking account of the risks non-fulfillment would create."¹²

¹² TBT agreement article 2.2.

Technical regulations are sometimes the most appropriate tool for achieving desired regulatory goals. However, because they are the most stringent and, usually most trade-restrictive and costly form of government control, many experts believe they should be reserved for use in situations where no other alternatives exist that will ensure acceptable consumer or societal protections. Therefore, GRP principles suggest that governments consider all potential regulatory and nonregulatory options before adopting their response, which should entail the minimum regulation necessary to meet the need (APEC 2000, 3-60; New Zealand Ministry of Economic Development 2006, 1-2).

Reducing the administrative burden on businesses is another way to minimize the trade-restrictiveness of technical regulations (OECD 2003, 39). Obtaining required forms, licenses, permits, and completing requested forms and other paperwork can result in unnecessary delays and costs for businesses. While the requirements may be the same for both domestic and foreign firms, foreign companies may be impacted more, given their lesser familiarity with a particular country's administrative requirements.

To address the administrative burdens faced by businesses, the European Commission has established a "better regulation strategy" aimed at measuring administrative costs and reducing administrative burdens. A Commission study on administrative burden costs incurred by business based on regulations suggested that reduction of such costs by as much as 25 percent by 2012, could "have a significant economic impact on EU economy – an increase in the level of GDP of about 1.4%" (European Commission 2009, 1). An OECD study points out that there are a number of ways countries can go about reducing these burdens:

Strategies to make administrative regulations simpler and less burdensome to comply with, such as one-stop shops, simplification of license and permits procedures, time limits for decision-making, and the use of IT-driven mechanisms can all contribute to efforts to reduce the restrictions on the flow of trade and investment (OECD 2004, 11).

Use of Internationally Harmonized Standards and Technical Regulations

The GRP principle encouraging use of internationally harmonized standards and technical regulations may help bring down TBTs by reducing the need for redundant certification and testing, opening markets to trade, and saving time to market (UN 2006, 8). Complying with different foreign technical regulations and standards entails significant costs for producers and exporters. Such costs arise from the need to translate foreign regulations, hire technical experts to explain foreign regulations, and adjust production facilities to comply with the requirements (WTO 2008). In addition, firms must demonstrate that exported products meet the foreign regulations, raising certification, testing, and other conformity assessment costs (Johnson 2008, 5-6).

When companies are able to produce to the same international standard, they may produce a single version of a product rather than having to produce different versions for the various markets in which they wish to compete. Further, exporters can reduce costs by developing a single regulatory management system to meet product manufacturing requirements. Thus, by using technical regulations that reference harmonized standards, countries may reduce the trade impact of the technical regulations and prevent unnecessary trade barriers (OECD 2000, 10-11).

High-Quality Technical Regulations

Because technical regulations usually constitute the most stringent forms of government control, GRP principles stipulate that such regulations be of a high quality to assure that they do not unnecessarily impede business or become trade obstacles. High quality regulations are efficient, coherent, and simple, focusing on targeted problems, while causing minimum side effects (Radaelli 2004, 4). The use of

science-based, risk-based regulatory approaches, leading to higher quality technical regulations and conformity assessment procedures, may lessen distortions to trade and innovation and boost economic growth.¹³

Inefficient or ineffective technical regulations can create trade barriers by increasing manufacturers' costs and reducing their access to important foreign markets. Moreover, badly constructed technical regulations and conformity assessment requirements may even be ineffective in attaining their regulatory objectives.

Inappropriate or badly drafted regulations can potentially result in substantial costs or inefficiencies being imposed upon both the sector and the economy as a whole...the direct results of inappropriate regulation in a particular sector are likely to be higher costs, higher prices, misallocation of resources, a lack of product innovation and poor service quality (Aorere, 2).

When technical regulations are deemed necessary, GRP principles suggest that regulators may be able to improve their quality and reduce their economic and trade effects by using performance-based rather than prescriptive technical regulations and basing technical regulations only on relevant parts of voluntary standards (Aorere 2008, 2; and Shortall 2007, 15–16). Prescriptive¹⁴ technical regulations specify the means for achieving a specified regulatory objective. By providing only one solution, they preclude the opportunity for regulated firms to use alternative, more efficient, less costly means to achieve the same aim (OECD 2000, 9–10). While prescriptive regulations appear to offer more certainty that the regulatory objectives will be met, they stifle innovation and use of new technologies by regulated companies. When a number of countries prescribe different technical specifications to achieve the same or similar regulatory objectives, trade may be unnecessarily impeded by the firms having to produce different versions of their products. In such instances, firms may lose scale economies, leading to higher costs for producers and higher prices for consumers (Aorere 2008, 2).

Performance-based technical regulations, on the other hand, provide firms with flexibility while still ensuring that regulatory objectives are attained (APEC 2000, 9–10). An example of a performance-based regulation is a requirement for manufacturers to reduce carbon emissions by 40 percent. Rather than specifying in detail how the company is to achieve this goal, such a regulation lets the firm determine itself how it can best and most effectively comply. Because, the WTO considers performance-based technical regulations to be a less trade-restrictive means of regulation, it encourages them in its TBT agreement provisions indicating that “Wherever appropriate Members shall specify technical regulations based on product requirements in terms of performance rather than design or descriptive characteristics.”¹⁵

GRP principles also hold that when voluntary standards are referenced in technical regulations, only those parts of the standards that are relevant to achieve the regulatory objective are included (APEC 2000, 1–32). This is because voluntary standards, which are not necessarily developed for purposes of regulation, may contain parts that are not essential to the objectives of the technical regulations referencing them. Including parts of standards that are not required to meet technical regulations result in unnecessary TBTs.

¹³ U.S. trade official, interview by Commission staff, November 25, 2008.

¹⁴ Also known as design or descriptive standards or technical regulations.

¹⁵ Article 2.8.

Recognition of Other Countries' Technical Regulations

Often technical regulations of one country may be used to accomplish goals that are the same as or similar to the goals aimed at by another country's regulations, even if they are using different means. In these cases, the recognition of equivalency by regulatory authorities of other countries' technical regulations may lessen their trade restrictiveness (Aorere 2008, 3). Therefore, GRP principles encourage countries' recognition of equivalence whenever possible. Through equivalency arrangements, products that meet the regulations of the exporting country do not have to comply with the regulations of the importing country, provided that the same objectives are fulfilled by the two sets of requirements (Motaal 2008, 6). A recent study suggests that recognition of equivalence may significantly reduce barriers to trade (Baller 2007, 1). The following example shows how equivalency can be used to reduce trade barriers without compromising the regulatory objectives of the countries involved.

[C]ountry A, wishing to protect its environment from high auto emission levels, requires that cars be equipped with a catalytic converter. In country B, the same objective is achieved through the use of diesel engines in motor vehicles. Since environmental concerns are identical in the two countries—to reduce the levels of pollutants in the air—A and B can agree that their technical regulations are essentially equivalent. Thus, if car manufacturers in country A want to export to B, they will not be obliged to satisfy country B's requirement to fit diesel engines, and vice versa. This will eliminate the costs of adjusting production facilities to fulfil foreign regulations (WTO 2008, 1).

The WTO TBT agreement supports unilateral recognition of technical regulations as a practical means for giving importing members adequate confidence that products conform with relevant technical regulations or standards while ensuring that conformity assessment procedures are not more strict or applied more strictly than necessary (WTO 1997, 1). Specifically, article 2.7 of the TBT agreement states that “members shall give positive consideration to accepting as equivalent technical regulations of other Members, even if these regulations differ from their own, provided that they are satisfied that those regulations adequately fulfill the objectives of their own regulations.”

The regulatory policies of a growing number of countries support the unilateral acceptance of equivalency. For instance, Canada requires regulatory bodies to recognize equivalency for both foreign technical regulations and foreign certification and testing procedures if determined that the foreign regulations and procedures attain the regulatory objective or assure conformity with Canadian regulations (Shortall 2007, 27). Switzerland has also instituted a policy of unilateral recognition of foreign conformity assessment procedures when they are based on tests or procedures that meet Swiss requirements (WTO TBT Switzerland 1998,1). Unilateral recognition has also been recognized in certain instances by various U.S. regulatory agencies.

Another approach to achieving equivalence is the use of mutual recognition agreements (MRAs). The TBT agreement encourages members to enter into MRAs for the acceptance of each other's assessment results. MRAs allow product testing and approval in the home country for compliance with other countries' technical regulations. For example, under the telecom MRA arranged under the Asia Pacific Economic Cooperation (APEC) forum between the United States and Singapore, a cellular phone tested and certified in the United States may meet Singapore's technical requirements and be shipped and marketed throughout Singapore without the need for any further conformity testing or approvals (NIST 2007, 1). The United States also maintains a comprehensive MRA with the European Union that covers several different industries and regulatory issues.

However, while MRAs may be appropriate in some cases, they may not always be the most cost-effective means of reducing TBTs for less-regulated products. For instance, while seeking international compatibility in conformity assessment, the possibility of an MRA may require countries with less regulated systems than other negotiating countries to introduce more regulation than may be necessary. Also, negotiating and implementing MRAs generally entails extensive costs for government negotiators and regulatory agencies. Moreover, MRAs may discriminate against other countries that are not parties to the agreements (Amurgo-Pacheco 2007, 1). Thus, alternative, potentially less-trade-restrictive means for accomplishing the same objectives, such as unilateral recognition of other countries' technical regulations and conformity assessment results, are often the most effective approach to reducing TBTs (USITC 1998, iii-iv, 5-1-5-9).

Regulatory Coordination and Consistency

Regulatory coordination and consistency are indispensable for ensuring GRP and the prevention of TBTs at both the domestic and international levels (WTO TBT Committee 2008b, 3). In a global economy, problems and regulatory responsibilities are shared among many levels of government, including supranational, international, national, and subnational levels. Therefore, as an OECD study points out, "high quality regulation at one level can be undermined or reversed by poor regulatory policies and practices at other levels, while, conversely, coordination can vastly expand the benefits of reform" (OECD 1999b, 19). On the domestic level, it is important that a country's government agencies, ministries, departments, and other bodies subject to central government control consult frequently with one another to reduce redundancy or conflicts in regulations. It is also important for the central government to coordinate its regulatory activities with those at local levels (state, province, Länder, cantons, municipalities, etc.). At the international level, GRP principles encourage central government regulators to regularly engage in consultations, information/exchange, recognition arrangements, and other activities that minimize duplication and redundancy in technical regulations and conformity assessment activities for both domestic and foreign companies conducting business in their markets.

The coordination of government regulatory activities at the central government, state, and local levels is also becoming increasingly urgent from the perspective of international market openness (OECD 2002, 1-50). Enhancing market openness at the central but not other levels, particularly in areas of overlapping authority, risks reducing the effectiveness of central government reform efforts. On the other hand, broadening the reach of the interagency trade policy mechanism across different layers of decision-making may present opportunities to make domestic regulatory activities more attentive to market openness considerations and thereby increase opportunities for trade (OECD Background Document 2007, 1-9). The WTO TBT committee and the OECD's trade committee have both emphasized how important it is for members to coordinate effectively among trade officials, standards organizations, and regulators in implementing the agreement (Shortall 2007, 31).¹⁶

Effective and credible mechanisms inside the government for managing regulation are indispensable for reform (OECD 2002). OECD evidence shows that a well-organised and monitored process, driven by "engines of reform" with clear accountability for results, is important for the success of the regulatory quality policy. While in 1996 only 14 OECD countries had set up a dedicated body (or bodies) responsible for promoting the regulatory policy and monitoring and reporting on regulatory reform and regulatory quality in the national administration from a whole of government perspective, 23 countries had one in 2005, according to preliminary results from the most recent survey on regulatory quality indicators.

¹⁶ TBT Committee G/TBT/9 13 November 2000, 2.

These institutions have brought important improvements for the regulatory systems and the reform processes (OECD Background Document 2007, 1–9).

Effective coordination of regulatory programs and activities often depend upon strong central government management of the regulatory regime. For example, in the United States, centralized regulatory oversight in the Office of Management and Budget (OMB) in the executive branch of the government is intended in part to minimize duplication and inconsistency among regulations and to balance the demands of competing and conflicting regulatory agencies and programs (Presidential Executive Order 12866;¹⁷ APEC and OECD 2008, 8; OECD 1999a, 1). Centralized regulatory oversight also makes it easier to integrate trade policy objectives into the regulatory coordination function. Thus, OMB consults informally with the United States Trade Representative (USTR) when questions arise about legality of proposed regulations under the country's obligations under the WTO and other trade agreements, as well as before a regulation goes forward for publication as a draft in the U.S. Federal Register (OECD 1999a, 17–18). USTR, for its part, oversees an interagency trade policy organization that incorporates input from dozens of government agencies, including regulatory agencies, in the implementation and coordination of the U.S. trade policy. Similarly, Canada has implemented an agreement on internal trade for the purpose of enhancing trade, promoting harmonization of regulatory practices, and streamlining standards and technical regulations, while Australia has established an MRA between Commonwealth, states, and territories to improve cooperation and coordination of regulatory programs and activities (Shortall 2007, 32).

Efforts of International Organizations to Promote GRP

The WTO, OECD, and APEC have promoted GRP extensively. For instance, in its first triennial review of the TBT agreement, the WTO Committee on Technical Barriers to Trade (WTO TBT Committee) highlighted the importance of GRP in guiding and facilitating the implementation of technical regulations (WTO 1997, 6). The Committee noted that it was vital for members to avoid promulgating unnecessary technical regulations, limiting regulations to members' specific requirements, and aligning the regulations with international standards. Accordingly, the Committee adopted the following recommendation:

(a) When considering the preparation of a technical regulation, it is important for Members first to identify the related problem, including its magnitude and the legitimate objective; and then consider all options available consistent with the Agreement, bearing in mind that....a technical regulation shall not be more trade restrictive than necessary to fulfill a legitimate objective, and shall not be maintained if the circumstances or objectives giving rise to its adoption no longer exist or if the changed circumstances or objectives can be addressed in a less trade-restrictive manner (WTO 1997, 6).

The OECD has contributed to understanding how countries can use GRP to achieve regulatory goals in ways that are efficient and coherent with the attainment of other policy goals (Kleitz 2006, 1). In 1997, OECD countries reached agreement on a broad set of principles for regulatory reform, covering economic regulations, social regulations, and government formalities. Over the ensuing decade, by analyzing national experiences with regulatory reform, the OECD developed a conceptual framework for assessing GRP (Shortall 2007, 9).¹⁸ The framework is based on six principles of efficient regulation that were

¹⁷ Presidential Executive Order (E.O.) 12866, September 30, 1993, as amended by E.O. 13258 of February 26, 2002, and E.O. 13422 of January 18, 2007.

¹⁸ The following 21 OECD countries have been reviewed so far: Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Korea, Mexico, Netherlands, Norway, Poland, Spain, Switzerland, Turkey, United Kingdom, United States. One non-OECD country, Russia, has also been reviewed, thus

identified in OECD discussions as critical for (1) assessing the implications of regulatory practice for trade and market access country reviews and (2) highlighting best practices through systematic publication of detailed information. Major tools identified by the OECD to improve the efficiency and effectiveness of regulation include systematic consideration of alternatives, wide public consultation, and improved accountability arrangements in reviewing existing regulations and developing new ones (Commonwealth of Australia 2007b, 3).

APEC also has promoted the need to address GRP as part of its integrated approach to trade facilitation (Shortall 2007, 9). In 1997, APEC's Standards and Conformance Sub-Committee (SCSC) developed and adopted guidelines, based on WTO principles, for the preparation, adoption, and review of technical regulations (New Zealand Ministry of Economic Development 2006, 4). The guidelines offer APEC members a common framework and set of principles for preparing technical regulations (Shortall 2007, 8). APEC leaders believed that promoting similar approaches to regulatory management in members would lead to economies, consistency, and transparency of technical regulations, thereby reducing unnecessary TBTs.

Given their parallel work on GRP, the OECD and APEC established a cooperative initiative in 2002 to promote GRP principles by building members' domestic capacities for quality regulation (APEC and OECD 2008b, 2–41). A first phase of the initiative was completed in October 2002, when members agreed to develop an integrated checklist for countries to assess themselves on regulatory, competition, and market openness policies implementing the APEC and OECD GRP principles. The resulting checklist was approved by the respective executive bodies of the organizations in 2005.

The APEC-OECD Integrated Checklist integrates APEC and OECD principles on regulatory reform (Commonwealth of Australia 2007a, 1–10). While the checklist contains no single model of regulatory reform, it highlights key issues to be considered in developing and implementing of GRP, while recognizing that the diverse economic, social, and political environments and values of member countries require flexibility both in applying the checklist and in using the information it generates (APEC and OECD 2008b, 2–41).

Regulatory Impact Analysis: Achieving Regulatory Quality Through Economic Analysis

Using regulatory impact analysis (RIA), countries may reduce or avoid proposed technical regulations' adverse effects on trade by examining their potential effects before adopting them and by recommending regulatory solutions that have the least restrictive impact on trade and investment (OECD 2007, 1–10). RIA systematically identifies and quantifies important benefits and costs likely to flow from the adoption of proposed regulations or nonregulatory alternatives under consideration (Harrington and Morgenstern, 2004, 2) (box 4). It may also be used as a tool to examine some of the impacts of regulations on market openness and thereby to minimize their trade restrictiveness (Shortall 2007, 11–13). RIAs assess all possible impacts and elements of proposed regulatory policies at every stage of their development based on cost/benefit analysis, cost effectiveness analysis, or business impact analysis (APEC-OECD 2005). They can provide regulators with information and data that enable them to choose among a variety of regulatory alternatives for achieving a specific regulatory objective in a way that minimizes the impact on trade (Hunt 2007, 1–9; OECD 2004, 10–11).

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BOX 4 Regulatory impact analysis

Key steps:

1. Identify the problem.
2. Define the regulatory objectives.
3. Develop alternative policy options for achieving regulatory objectives considering all feasible options (regulatory, nonregulatory, and the option to do nothing).
4. Analyze the effectiveness of each option in achieving the regulatory objective.
5. Analyze the various impacts of each alternative, including compliance and other costs, trade, and economic impacts.
6. Select the alternative or option that effectively achieves the regulatory objectives with least adverse impact on trade and other relevant criteria.
7. Develop a regulatory impact statement.
8. Develop a policy monitoring and evaluation plan to continue to assess effectiveness and impacts of the selected option after it is adopted/implemented.

Source: (OECD 2007, 1–15).

The European Policy Centre points out that while RIA incorporates benefit-cost analysis and other quantitative tools in its methodology, it is much more than that (Ballantine 2001, 2). It is a tool to make better informed regulatory decisions by clarifying the costs and benefits; to make government processes more open, transparent, and accountable; and to avoid unnecessary costs “within a framework that recognizes that there are no risk-free options” (Ballantine 2001, 2). RIA is based on six fundamentals: justification, consultation, analysis, maximization of overall net benefits, consistency, and accountability, as outlined in table 2 below.

TABLE 2 RIA fundamentals

Justification	Clear identification of specific social, economic, or environmental problems and a convincing justification of the value and likely effectiveness of government regulation.
Consultation	Extensive and transparent consultation with all stakeholders to widen public debate about government intervention, to identify the costs and benefits of regulatory proposals, and to minimize the risk of regulatory capture.
Analysis	Systematic, empirical analysis of costs, benefits, and alternatives that take into account the real world impacts of regulatory strategies on stakeholders, public health and safety, and the environment.
Maximizing overall net benefits	Focus on achieving regulatory solutions that maximize the overall net welfare of all citizens.
Consistency	Use of common, standard, practical operating procedures that ensure consistency of analysis throughout all parts of government.
Accountability	Clear, structured communication to policymakers and regulators of the consequences of choosing specific regulatory goals or strategies.

Source: Compiled by Commission staff from Ballantine 2001, 2.

While RIA represents a systematic approach to assessing regulatory proposals, its purpose is not to make decisions, but to serve as an important tool to improve decisionmaking. It provides information and data to policy makers that help them make balanced decisions by helping them weigh and trade off alternative solutions to specific regulatory objectives.

Because RIA provides decision-makers with detailed information about the potential effects regulatory measures may have, it contributes to accountability, transparency and consistency, and can be useful in promoting economic and social welfare (Rodrigo 2005, 3 and 8; Kirkpatrick and Parker 2003, 3).

RIAs also serve other purposes in improving GRP. For example, preparation of an RIA provides regulators with a framework for thinking through the intended and unintended consequences of proposed regulations and requires them to consult with those they regulate. It also encourages regulatory agencies to develop economic, statistical, and policy analysis expertise required to prepare RIAs. RIA also can better inform the regulatory debate among policy advocates and opponents and help all branches of government understand better the implications of government regulatory proposals and decisions (Harrington and Morgenstern 2004, 3). Finally, RIA can help identify alternatives to regulation, help regulators understand the true costs and benefits of regulation, improve regulatory design, and introduce new ways of regulatory thinking in government (table 3).

TABLE 3 Benefits of regulatory impact analysis

Identify alternatives to regulation	The RIA process can help identify situations for which the use of nonregulatory solutions is a more appropriate course of action than traditional command-and-control regulation. It can also identify situations in which taking no regulatory action will yield the greatest benefit to society.
Understand true costs and benefits of regulation	The RIA process can help policy makers and regulators understand the full impact of economic, environmental, and social costs and benefits of regulations. It can help identify unintentional or unexpected consequences of regulations, including “risk/risk” paradoxes (where reductions in one risk lead to an increase in another).
Maximize the benefits of regulations	RIA can help regulators identify specific interventions that produce real benefits and to structure regulations around the most effective solutions to produce results.
Avoid regulatory failure	RIA can help governments avoid the introduction of regulations that fail to achieve their original objectives or that have negative impacts that significantly exceed benefits.
Improve design of regulations	RIA can identify different regulatory design options where small changes in the design of a regulation can lead to significant benefits or to greater coherence between policies. They can also identify potential problems that enable decision makers to redesign or even abandon proposed regulations.
Improve transparency	RIA can help to achieve greater transparency in the consultation process by actively engaging business, consumers, and other stakeholders.
Increase accountability	RIA can help to make more explicit the basis on which decisions are taken and the policy trade-offs involved. RIA can also make it easier for regulators to resist pressures from special interest groups, as it encourages public debate of net benefits and exposes the distribution of likely impacts among groups in society.
Achieve new ways of regulatory thinking (culture shift)	RIA can help introduce new ways of thinking in government founded on greater questioning of the need for government intervention; improved discussion of the alternatives to traditional regulation; improved awareness of the benefits of stakeholder consultation; and improved awareness of the policy tradeoffs implicit in decision-making.

Source: Compiled by Commission staff based on Ballantine 2001, 2.

RIA Experience

The use of RIA has increased steadily in recent years in both developed and certain developing countries (boxes 5 and 6). For instance, a study completed in 2006 showed that the number of OECD countries using RIA in their regulatory review process increased from none in 1971 to 24 in 2006 (figure 2), while the use of RIA in non-OECD countries rose from none in 1995 to 15 in 2008 (Jacobs 2006). Another survey of 24 OECD countries showed that about one-half of them required RIAs to be completed for all draft laws and technical regulations, with several others requiring RIAs to be completed for major regulations (figure 3). The survey also showed that one-half of the countries required regulators to provide cost-benefit analyses and non-cost effects of proposed regulations (Rodrigo 2005, 7; Ballantine 2001, figure 3). Countries using RIA reported that it improved their understanding of the “real world” costs and benefits of proposed government regulatory policies, increased their ability to integrate multiple policy objectives, improved transparency and consultation with affected parties, and improved government’s accountability with respect to regulatory policy (Rodrigo 2005, 7).

BOX 5 Regulatory impact analysis in advanced countries: the United States

RIA was first used as a formal government requirement in the United States. In fact, the term “regulatory impact analysis” was coined by President Reagan in Executive Order 12,291. To encourage the development of more effective and efficient regulations, Presidents Reagan, Bush, Clinton, and Bush have required federal agencies to perform economic analyses of major regulations that show whether the benefits of the proposed regulations are likely to exceed their costs and to compare such costs and benefits with those of alternative solutions. Each administration has also attempted to increase agency accountability by requiring the President’s Office of Management and Budget (OMB) to review major regulations. U.S. regulatory agencies have prepared RIAs for almost 30 years.

Early in his administration, President Obama expressed his support for centralized review of Federal regulations by OMB, affirming it as both a legitimate and appropriate means of coordinating regulatory policy. Because the President indicated that he believed that “a great deal has been learned about how to improve the process of regulatory review since the fundamental principles and structures governing regulatory review were first set out,” in February 2009, he directed the Director of OMB to consult with representatives of regulatory agencies to produce a set of recommendations for a new executive order on Federal regulatory review.

Sources: Extracted and compiled by Commission staff from Hahn, Burnett, Chan, Mader, and Moyle 2000, 3; Harrington and Morgenstern 2004, 2; Ballantine 2001, 1; [U.S.] C.F.R. 128 (1981); and 74 Fed Reg 5977 (February 3, 2009).

BOX 6 Improving the use and effectiveness of RIA in developing countries

Many developing and emerging countries have introduced RIA with the goal of consolidating the state's role in establishing democratic institutions, ensuring the effective regulation of competitive markets, and generally improving the overall quality of regulatory performance.

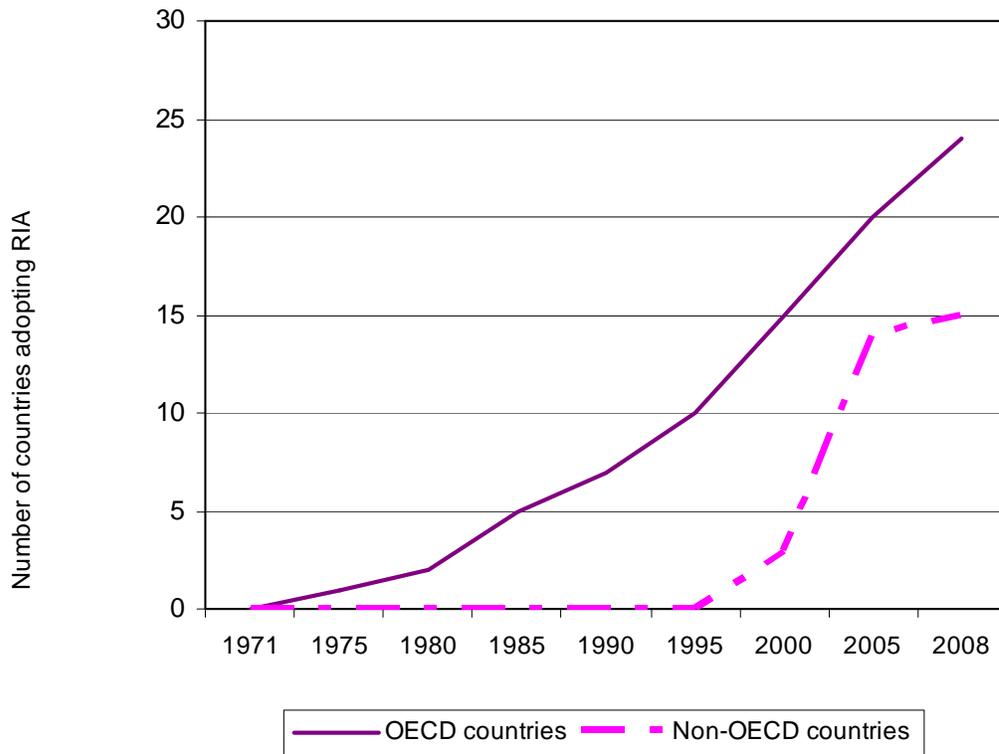
However, designing and applying effective RIA in developing countries requires consideration of a number of issues. First of all, methodological and operational difficulties can easily arise in decision-making processes of developing countries. Secondly, often the use of regulatory tools requires a higher level of expertise and access to extensive resources and information that developing countries do not have. Thirdly, common political practices in such countries often make the political oversight, consultation, and transparency required of RIA very challenging.

The OECD has offered four components of a dynamic regulatory system that may be helpful to developing countries in creating an integrated reform strategy:

- ***Build a regulatory management system that can lead the reforms***
 - strategic reform policy
 - engines of reform: regulatory reform unit at center of government
 - responsible minister
- ***Build the institutions to carry out good regulation***
 - trained and skilled regulators
 - one-stop shops
 - due-process reforms
- ***Improve the quality of new regulations***
 - adopt principles of regulatory quality
 - systematic use of RIA
 - transparency and stakeholder consultation
- ***Upgrade the quality of existing regulations***
 - targeted deregulation, simplification
 - broad-based reforms
 - rolling programs of review of targeted sectors

Sources: Extracted and compiled from Jacobs 2005; OECD, 2005 and 1997; and Rodrigo, 2005.

FIGURE 2 The global spread of RIA



Source: Jacobs 2006, 5 and Rodrigo 2005, 7.

Assessments of RIAs based on a total of 16 case studies completed in the United States and Canada indicated that well-done RIAs led to more rigor and discipline in the regulatory process (Morgenstern 1997, 1-20; Delphi Group 2000, 1-15).¹⁹ This was achieved by requiring policymakers and regulators to “think critically about the implications, both positive and negative, of the regulations they propose” (Harrington and Morgenstern 2004, 3). RIAs also placed responsibility on regulators to provide a rationale for recommending the adoption of regulations with negative benefits. Thus, the studies concluded that well-done RIAs improved government regulatory decision making.

Another study, using 12 case studies completed by the U.S. Environmental Protection Agency (Rodrigo 2005, 16), suggested that all of the RIAs reduced costs, and 5 of the 12 resulted in changes to regulatory proposals that increased benefits (Morgenstern and Landy 1997, table 1). Other benefits of the RIAs identified in the study included findings that:

- “the monetized benefits of reduced blood pressure [of a leaded gasoline rule] dwarfed other benefits of reduced lead exposure and resulted in a tightening of the rule” (Nichols 1997, 1);
- the cost of a proposed asbestos ban would be modest because of the availability of ready substitutes; and

¹⁹ Morgenstern reviewed 12 case studies of regulatory processes at the U.S. Environmental Protection Agency, and the Delphi Group surveyed of six studies of a variety of types of regulation in Canada.

- a banking and trading alternative for reduction of chlorofluorocarbons (CFCs) reduced costs and provided benefits beyond that of the more restrictive proposed regulation to reduce CFCs (Harrington and Morgenstern 2004, 17).

However, other studies on RIAs have been less positive. Several studies surveying RIAs used by U.S. regulatory agencies concentrated on whether they focused on all of the elements essential to an effective regulatory analysis (Hahn and others 2000; Harrington and Morgenstern 2004, 3). Their surveys suggested that many of the RIAs they examined were poorly done. Another study assessed whether RIAs led to the issuance of more cost-effective regulations (Farrow 2000, 1–10). It found that regulations completed without RIAs “were not much less cost effective” than those that were and that the RIAs “could not be credited with any improvements in cost effectiveness between the proposed and final rule ” (Harrington and Morgenstern 2004, 3; Farrow 2000, 2–25). Another study using multivariate regression to analyze a database of 69 regulations proposed by several U.S. government agencies (and reviewed by OMB) found that the regulatory review process had only a slight positive impact on cost-effectiveness and that the cost-effectiveness of rules did not improve substantially as a result of the process (Farrow 2000, 1; Harrington and Morgenstern 2004, 15).

Other experts have questioned whether current RIA methodologies that focus on short-term incremental changes on domestic economies are capable of taking into account the full complexities of regulatory decisions that have significant and differential long-term global impacts. For instance, in March 2009, the Pew Center on Global Climate Change offered recommendations to OMB regarding the use of benefit-cost analysis as a tool as it might apply to pending and future proposed U.S. regulations for reducing greenhouse gas emissions (box 7). The comments were informed by a workshop, organized by the Pew Center, which brought together 75 of the world’s leading experts on issues in assessing the benefits of economically efficient policies to mitigate global climate change (Pew Center for Global Climate Change 2009, 1). Among other things, the center pointed out the need to consider global, rather than only domestic, benefits of climate policy to ensure a globally efficient outcome, as well as to use appropriate parameters in empirical methodologies to take into account the possibly large and irreversible damages that climate change might inflict on future generations.

BOX 7 Global climate change: benefit-cost analysis of regulatory impacts

The Pew Center on Global Climate Change offered the following recommendations on the use of benefit-cost analysis (BCA) to assess economically efficient policies to mitigate climate change:

- Traditional BCA can be an effective tool for evaluating policy recommendations with respect to incremental changes in greenhouse gas emissions and climate impacts, e.g., for regulatory decisions for assessing auto fuel efficiency (i.e., CAFÉ), or appliance efficiency standards. However, it should not be used for decisions that are non-incremental, such as long-term decisions concerning decarbonization of the energy sector.
- To ensure a globally efficient outcome, global, rather than only domestic, benefits of climate policy should be considered when using BCA to evaluate domestic climate policy.
- Use of a constant 7 percent discount rate (as is typical in OMB BCAs) is inappropriate for a variety of reasons, including the widely recognized potential for large and irreversible damages on future generations. Instead, a much lower rate of 3 percent should be used to account for the intergenerational nature of the issue, and the analysis should take into account the uncertainty over time associated with any long-term discount rate.
- The benefits calculated in BCA are derived from integrated assessment models that omit a large number of potentially significant impacts. Analysts should compensate for this underestimation of benefits.
- BCA should evaluate and communicate the sensitivity of results to uncertainty in key model parameters and future outcomes, such as climate sensitivity, the rate of climate change, carbon cycle feedbacks, the magnitude and timing of impacts, the efficacy adaptation, and potentially catastrophic outcomes with unknown but non-zero probabilities.
- Climate policy is unlike other regulatory issues that fall squarely within existing OMB guidance. Because of the unique characteristics of climate change, OMB should develop separate guidelines specific to analyzing climate policy.
- Over the longer term, BCA alone should not serve as the primary metric for setting or evaluating climate-related policies; new methods must be developed and implemented to provide a more complete assessment of benefits.

Source: Pew Center on Global Climate Change, Recommendations in Response to OMB Request for Comments, March 31, 2009.

Regulatory analysts point out that RIA is a challenging process that needs to be refined over time.²⁰ The mixed results of the studies on RIAs or new challenges do not diminish the concept of RIA itself, but merely confirm the importance of conducting high-quality impact analyses using well-trained officials. They also suggest that limited resources need to be focused on high-value targets and that regulatory analysts be given the flexibility to apply appropriate methods suited to the magnitude of the issue at hand. As Delia Rodriguez emphasized:

Regulators must have the skills to conduct high-quality RIA. They should clearly understand the methodological and data collection processes and the role RIA plays in assuring regulatory quality. The stringency of RIA requirements should be progressively increased as the skills and capacities of regulating ministries improve (Rodrigo 2005, 16).

The most rigorous RIA methods should be targeted toward proposals that have the largest economic and social impacts on a country, given the cost constraints of public budgets (Rodrigo 2005, 18). For example, in the United States, OMB requires a full benefit-cost analysis for proposed regulatory measures that are determined to be “economically significant.”

In the United States, a full benefit-cost analysis is required if a regulatory measure is deemed economically significant—if it is expected to represent annual costs exceeding USD 100 million; if the measure is likely to impose a major increase in costs on a specific sector or region; or if it will have significant adverse effects on competition, employment, investment, productivity or innovation. The United States’ Office of Management and Budget reviews roughly 600 regulations a year (15–57 percent of the regulations published), of which fewer than 100 (1–2 percent of the regulations published) are considered “economically significant” (Rodrigo 2005, 18).

GRP and Trade

Many analysts believe that countries benefit from GRP by avoiding unnecessary trade restrictiveness and TBTs. Between 1998 and 2004, the OECD completed 20 country reviews of regulatory reform that appear to confirm this view: the reviewers demonstrated that the implementation of well-structured GRP programs contributed to improved economic and trade performance (Rodrigo 2005, 4). Such success is attributed to GRP tools such as RIA that provide policy makers with information that allows them to assess a variety of effective regulatory alternatives available for achieving a particular regulatory objective and choose the one that least distorts trade. GRP also contributes by supporting administrative simplification (OECD 2003, 39). While such simplification benefits both domestic and foreign suppliers, foreigners generally benefit more, since the administrative burden of meeting complex foreign regulations falls more heavily on them (OECD 2004, 6–12). This is because firms that operate in a number of different markets find it more difficult and costly to collect regulatory information and to understand and comply with administrative requirements that differ from country to country.

That being said, the ability of GRP to reduce TBTs can be maximized only when the impact of all trade factors is clearly taken into account in nations’ regulatory policies. While some countries are trying to improve their capabilities in this regard, an OECD research study suggested that many OECD members’ RIAs were still relatively weak in assessing two important elements: the impact of market openness, and

²⁰ U.S. government officials, telephone interviews by Commission staff, March 3, 10, and 17, 2009.

trade impacts of regulatory proposals (OECD 2004, 13; Shortall 2007, 11). Even where countries included a requirement to consider trade and investment effects in proposed regulations, they generally were confined to considering the impact on trade with respect to the domestic market as opposed to specifying the impacts in terms of demonstrating compliance with WTO or other international trade obligations. In the study, Australia, Canada, and the United States were the only countries cited as explicitly subjecting trade agreements to regulatory impact assessments. The United States required RIA analysts to consider harmonization of proposed rules with international trade rules and whether the regulations might constitute non-tariff barriers. Most other countries in the study required the assessment of trade obligations in their RIAs only indirectly as a broader measure of the regulations' impacts on market entry, business activities, and competition (Shortall 2007, 11). According to some regulatory analysts, international trade issues must be more prominently incorporated into RIAs in the future:

Regulatory impact assessment (RIA) is the best known and most widely implemented tool among OECD governments, although it is a relatively new concept in developing countries. However, very few countries appear to require consideration of the impact on international trade in the conduct of impact assessment and most countries use the more indirect and less rigorous approach of assessing the effect of a potential regulation on competition and business. The incorporation in RIA of more explicit references to international trade could be a major focus for the trade policy community in the coming years. (Shortall 2007, 6).

U.S. and EU regulatory experts recently collaborated to better assess the trade implications of proposed regulations and develop solutions that considered such impacts (European Commission and OMB 2007, 14–15). The experts concluded that given the potential harm of proposed technical regulations—not only to foreign companies exporting to particular markets but to domestic markets of countries imposing regulations—it was important to develop methodologies that considered the size or extent of trade impacts on the domestic market in RIAs. For instance, if the production of a domestically manufactured good protected by a regulation uses more resources than the imported product and sells at a higher price, an RIA may show that the regulation would “induce a pure uncompensated cost, which is roughly equal to the average of the pre- and post-regulation quantity consumed multiplied by the price increase” (European Commission and OMB 2007, 14–15).

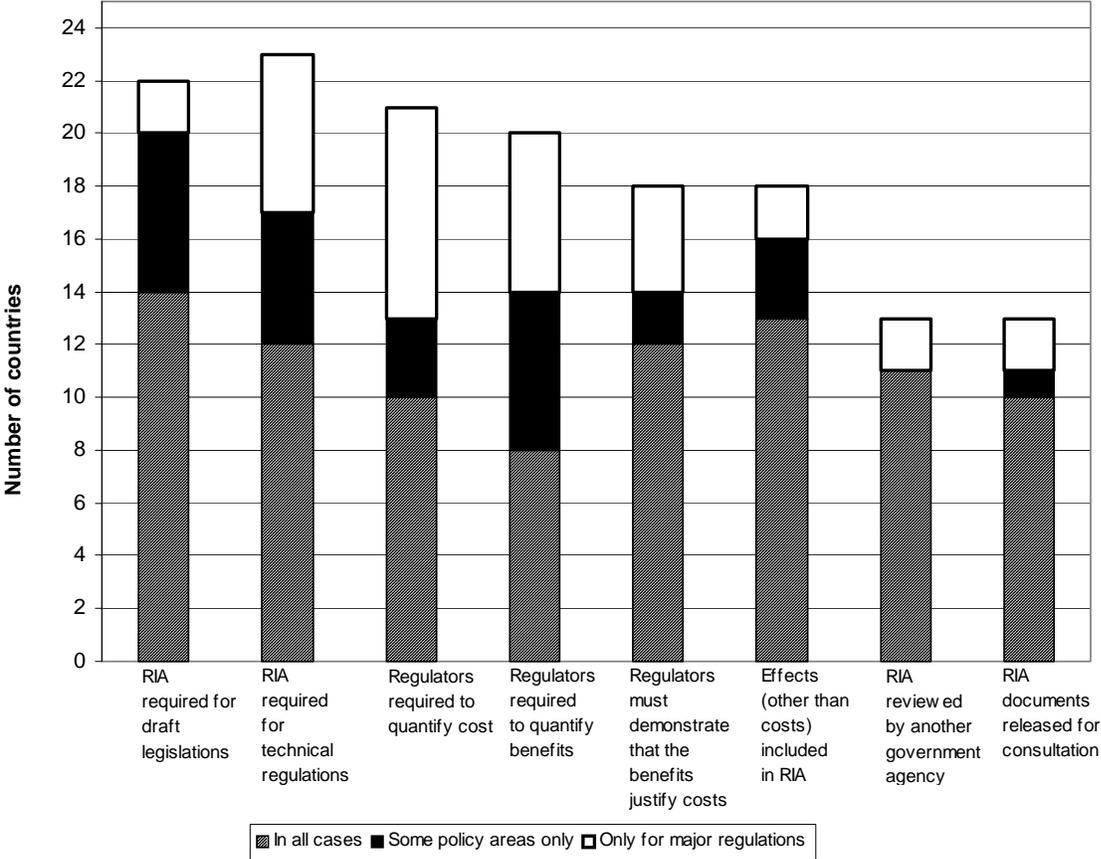
This cost would be exactly equal where price equals average costs for domestic suppliers. In the case where the producers of the domestic product sell at a post-regulation competitive price equal to their marginal costs, which lies on the upward sloping portion of their supply curves and at a price above their average cost, the cost of the regulation is less than is stated in the text. It is less by the excess of the domestic producers' total revenues above their total costs (European Commission and OMB 2007, 14).

Given that a proposed regulation may reduce the number of competing suppliers of the product that was imported before the regulation was imposed, a benefit-cost analysis may also be used to examine whether or not “market-power-based price increases” will ensue from the regulation. By using such an approach, “regulators may more easily distinguish a regulation affecting trade which benefits the producers in their country at the expense of the consumers in their country, from a regulation that retains welfare-enhancing trade where possible and only restricts trade, either indirectly or directly, in cases where the benefits outweigh the costs” (European Commission and OMB 2007, 14).

Other important factors that regulatory experts suggest need to be considered to make certain all possible impacts, including trade impacts, are addressed in proposed technical regulations are incorporating

systematic reviews of trade impacts in RIAs, including extensive consultation, and ensuring that international trade treaty obligations are taken into account (figure 3). For example, they point out the importance of providing opportunities for both foreign and domestic stakeholders to review and comment on all proposed technical regulations (Shortall, 2007, 12; Rodrigo 2005, 19). According to Shortall (2008, 33–34), most WTO members “have a mixed record in meeting the comment period for notification of draft technical regulations.” While most OECD and APEC countries have established GRP policies for prior consultation and comments by foreign-based persons and organizations, more needs to be done to develop Internet sites and other tools to ensure that comments are shared among all interested parties. Finally, there is also a “need for greater collaboration and coordination between trade and regulatory officials during the development of regulatory proposals” (Shortall 2007, 12).

FIGURE 3 Regulatory impact analysis policies in 24 OECD countries



Source: Adapted by Commission staff based on Rodrigo 2005, 7; and Ballantine 2001, figure 1.

Conclusion

GRP has become an increasingly popular means for both advanced and developing countries to reduce TBTs. It promotes awareness of trade and investment implications in regulatory decision making, encourages trade friendliness in regulatory approaches, and reduces discrimination against or impediments to foreign imports, ownership, and supply. GRP also helps improve the effectiveness of technical regulations in achieving important economic and social objectives, while minimizing unnecessary regulatory and administrative burdens for business.

Much progress has been made in the United States and among its trading partners to improve the regulatory decision-making process by using tools such as RIA to systematically identify important benefits and costs likely to flow from the adoption of proposed regulations or nonregulatory alternatives before adopting final measures. However, the impact of market openness and trade considerations of regulatory proposals still appear to be relatively weak components in many countries' RIAs. Given the potential harm that technical regulations can cause both domestic producers and importers, more focus and better methodologies are needed to assess the full trade impact of proposed technical regulations before they are adopted. To accomplish this will require more collaboration and coordination between trade and regulatory officials, fuller transparency and consultation with both domestic and foreign stakeholders, and consideration of all international trade treaty obligations with respect to proposed standards and technical measures.

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