

## Technical regulations and trade: Implications for regional integration

### INTRODUCTION

Technical regulations lay down compulsory requirements for product or service characteristics or their related processes and production methods. They have specific administrative provisions and conformity assessment requirements with which compliance is mandatory for safety, health, environmental control and consumer protection.

One of the key challenges inhibiting sustainable industrial development in South Africa is increasing the country's ability to integrate best practice and new technologies into product and process standards while supporting this integration by developing and maintaining relevant measurement capabilities and conformity assessment infrastructure. These institutions are important to ensure industries can overcome and mitigate trade barriers and participate in domestic and export markets.

The most recent Industrial Policy Action Plan (IPAP) document discusses South Africa's Technical Infrastructure\* (TI) by focusing on cooperation on standards, quality assurance, metrology and accreditation as espoused in the National Technical Regulatory Framework (the dti, 2006). The capacity to comply with international standards, norms and technical regulations underpins the potential for economic and industrial growth. Standards and conformity assessments are required to prevent the influx of substandard and injurious products into African markets and to improve the quality, and enhance potential access, of African products to export markets.

*\*South Africa's TI institutions are an important component of the Department of Trade and Industry's (the dti's) efforts to support industrialisation. The dti provides significant financial support to TIs through transfer payments (or grants) on a yearly basis. South Africa's TI is well established, comprising the following key institutions: South African National Accreditation System (SANAS), NRCS, South African Bureau of Standards (SABS) and National Metrology Institute of South Africa (NMISA). These are complemented by the work of the International Trade Administration Commission of South Africa (ITAC), The South African Revenue Service (SARS) and the National Consumer Commission (NCC).*

This policy brief examines the implications for regional integration that the strengthening of technical infrastructure capacity in African countries for metrology, standards, accreditation and conformity assessment and compliance could have for Africa's industrialisation efforts.

### TRADE-RELATED ISSUES

Non-Tariff Barriers (NTBs) have become more prominent relative to tariffs. Indeed as tariffs have been lowered, demand for protectionism has induced new NTBs, such as Technical Barriers to Trade (TBT) interventions in the form of technical regulations.

The total number of protectionist measures undertaken by the 27 European Union (EU) countries, together with Russia and Argentina, are far larger collectively than the rest of the G20 countries. Comparatively, the BRICS countries have implemented relatively more liberalising and transparency-improving measures than their G20 counterparts. However, South Africa's partners in BRICS feature predominantly as countries with considerable trade protectionist stances/policies that create problems for South African manufacturers.

According to Global Trade Alert (GTA) statistics (for 2013), the EU has the largest number of protectionist measures imposed on imports globally. The EU markets have, as such, subsequently affected the highest number of trading partners and economic sectors since 2008. It must be noted that these measures are newly introduced protectionist mechanisms as they have only been reported in the past five years.

South Africa suffers from a large number of trade restrictions (mainly tariffs, export subsidies and restrictions, bail-outs and public procurement issues), many of which stem from other emerging economies. Of interest to the BRICS agenda is that South Africa faces more measures than the country imposes on its partners.

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Based on previous  
TIPS research  
entitled *Study on  
the Strategic Use  
of Technical  
Regulations  
Enforcement and  
Other Supportive  
Interventions in  
Supporting Consumer  
Protection and  
Quality  
Manufacturing  
(2014)*. Authors  
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Tariff barriers continue to hinder South African exports the most, while state interventions such as subsidies and NTBs considerably hinder South Africa's access to export markets. Tariff measures account for a significant 19% of harmful measures being employed against South Africa. TBTs represent a small proportion of total harmful measures targeting or impacting South Africa — from more than 300 harmful measures reported by GTA, only five are recorded as “Technical Barriers to Trade”.

## TBTs LEAD TO COSTS

Technical barriers must be supported by a range of trade diverting enforcement tools in order to increase the effective rate of protection of local products against imports. These include import bans; process, product and packaging specifications; labelling requirements; controls on voluntary claims; administrative requirements; pre-border and post-market inspection.

The tools tend to engender costs – high compliance costs to international standards and technical regulations detract from the international competitiveness of entrepreneurs. Businesses often need to incur quality assurance compliance costs in terms of good manufacturing practices, occupational health and safety, laboratory testing, certification, verification, quality auditing and calibration.

In addition to this quality expenditure, enterprises also incur additional export-related quality and compliance expenditure if they wish to export to new markets. These expenses exclude significant investment in process re-design, new equipment, quality auditing, product and process certification and testing that may be necessary. The size of costs for quality compliance differs from sector to sector. For many sectors, it is negligible because quality assurance is based on suppliers' declaration or because firms are part of a global production chain, providing an integrated total quality system.

## IMPACTS ON INTRA-AFRICAN TRADE

Africa is home to some 30 regional trade arrangements, many of which are part of broader initiatives of intra-regional cooperation. Africa's regional economic communities are making progress in certain areas but the integration process still faces numerous challenges. Addressing barriers to trade caused by TBTs is one of them.

A review of selected regional trade agreements (RTAs) in Sub-Saharan Africa found that while these agreements contain provisions intended to prevent standards and technical regulations from unduly interfering with market access and trade, in most cases these provisions are weak.

Only two of the eight RTAs in Africa refer specifically to the World Trade Organization (WTO) Agreement on TBTs\* and except for the Southern African Development Community (SADC), TBTs are not a prominent issue for Sub-Saharan Africa's RTAs, which is a worrying trend in integrating Africa's markets.

There is evidence that some countries have taken various measures to develop TBTs using technical regulations, but major inconsistencies among countries' technical regulations – a major obstacle for trade – remain. There is scope for governments to look for opportunities of greater collaboration among their countries belonging to common regional blocks, to share and implement similar technical regulations. A notable case is the SADC region, where a widely recognised Standardisation, Quality Assurance and Metrology (SQAM) infrastructure encompassing standards, accreditation, and scientific and industrial and legal metrology has been put in place.\*\*

Poorly designed technical regulations have been identified as a barrier to deeper trade within SADC (Imani, 2007). A possible solution suggested for further integration is for smaller countries in the region to collaborate more closely within SADC so as to rely on fewer regulatory agencies and accredited regional providers of testing, inspection and certification of goods and services than is currently the case. At present many national agencies and institutions are used, each one requiring budgets while having troubles with staffing and accessing relevant expertise. The World Bank (2011) notes that in most SADC countries there are no procedures by which technical regulations are assessed for consistency with public policy objectives, whether the private sector has the capacity to implement them, or regulatory impacts on trade or competitiveness.

It has been noted that for countries in Sub-Saharan Africa there generally tends to be a weak SQAM infrastructure, which is speculated to be the result of capacity constraints, ranging from a lack of technical expertise to a lack of financial resources and organisational capacity. In South Africa, an example can be drawn from the plastics and packaging industry where this is the case. Plastics and packaging lack regulations to properly assess the quality of imports streaming in, but export requirements for products with packaging and labelling requirements cannot be met because of absent local standards. Food is another sector in which toxins in food products need testing. Moreover, as the toxin levels

\* [www.wto.org/english/docs\\_e/legal\\_e/17-tbt\\_e.htm](http://www.wto.org/english/docs_e/legal_e/17-tbt_e.htm)

\*\* *The objective of the SADC programme is the progressive elimination of technical barriers to trade among the member states and between SADC and other regional and international trading blocks, and the promotion of quality standards infrastructure in the member states.*

required for the EU market are particularly low, capabilities need to be in place in testing facilities so that South African firms can match these particular requirements for enhancing exports. Perhaps this is a sector the SA-EU Trade Development and Cooperation Agreement (TDCA)\* can be used to address in the future for trade facilitation.

There is also an import-export bias in developing regions in Africa where these regions favour low technical requirements for their imports while facing high TBTs for their exports to developed regions. Products are often re-tested in export markets, leading to large cost penalties for exporters, whereas products of substandard quality often find their way into regional markets, because the TBT infrastructure is underdeveloped.

## **POLICY IMPLICATIONS**

With standards, metrology and accreditation development and their application globally, critical is the notion of net social benefit – standards and regulations supported by metrology and accreditation infrastructure must lead to the positive economic benefits of trade and manufacturing that limit harm to consumers and increase value addition and maximise utility. In that regard cost-benefit analysis must be conducted whenever considering a proactive (sometimes reactive) action to substandard import threats and/or export blockages.

The following have been identified as the most relevant and practically applicable tools to consider in relation to regional integration.

### **Leveraging Existing Tools Better Particularly Mutual Recognition Agreements (MRMs)**

A mechanism used by some countries to reduce the barriers imposed by differences in technical requirements is an MRA. An MRA is an agreement in which one government recognises another country's testing and certification requirements as acceptable, without undertaking its own testing or customs inspections. Since the MRA requires a high level of trust in a partner nation's governance capacity, credibility becomes an important facet for developing countries. As a consequence most MRAs tend to exclude developing nations. There are some problems associated with this kind of framework. First, it violates the non-discriminatory and multilateral spirit of the WTO and, as a result, undermines the rule-based world trade system. Second, an MRA agreement between two developed nations may divert investment from a third developing nation. For example, the EU-US MRA may divert investment from a nation like Mexico.

Low participation in MRAs may reflect the difficulties that developing countries face in reaching

MRAs with other nations as they typically fail to establish credibility in their inspection procedures, which makes it difficult for developing countries to participate in MRAs with developed countries. Although differences in national objectives might be a motivator, there is an inherent contradiction in the global system, which intuitively locks out countries that cannot meet mutual agreement.

MRAs are generally not common among countries although Eastern European, Latin American and Caribbean countries actively participate in MRAs among member states. The use of MRAs with more trading partners could alleviate some of the testing and conformity assessment issues encountered by traders – noting that MRAs could lead to cost saving in the medium and long term. This tool can potentially (with greater application) be strategically focused to penetrate key targeted exports markets and used to further cement bilateral relations with South Africa's priority emerging markets.

These MRAs are used successfully by commercial industries to export their products. Although provision is made in several free trade areas (FTAs) between South Africa and other trading partners for MRAs, only a few examples exist for how it is used to support exports from South Africa. There are, however, voluntary MRAs between accreditation bodies that facilitate the acceptance of conformity assessment results. Accreditation bodies have been working at the international level towards harmonising international practices for accrediting conformity assessment bodies. The result of this work has been the establishment of global networks to facilitate the recognition and acceptance of certificates, test reports and inspection results.

### **Promoting Mutual (Harmonised) Development and Improved Dissemination of Standards and Compulsory Specifications**

#### **Standardisation and Technical Regulations**

In line with international best practice, transparency in the standards and regulation setting environment leads to improvements in understanding what is regulated and where standards are actually used to meet regulatory objectives. In developing standards, identifying regulatory objectives can ensure that attempts to promote wider harmonisation take account of desired industrialisation objectives. It remains important to focus on undeveloped and fragmented emerging industries that need attention and assistance with developing standards.

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\* The SA-EU TDCA calls on the partner states to undertake to promote the use of regional standards by undertaking to evolve and apply a common policy for maintaining the level of the standardisation, quality assurance, metrology, and testing and maintains that differences between parties should be reduced.

## Metrology and Accreditation

Traceability provides an essential link to conformity; without it firms will be forced to source such services from foreign suppliers. The strategic goal must be to support to South African enterprises and SMMEs to enable their acceptance in formal supply chains across the world. This would comprise: disseminating traceability and measurement expertise and services to commerce and industry; supporting accredited conformity assessment bodies (CABs), producing accurate measurements, certificates of analysis and certified reference materials; and facilitating the transfer of appropriate technology and skills, especially to manufacturing SMMEs.

Accreditation also plays a key role in expanding the pool of capable and internationally recognised CABs such as laboratories, and certification and inspection bodies used by the manufacturing sectors. This accreditation is done in an independent and internationally accepted manner, thus ensuring the worldwide acceptance of the test results, inspection reports and certificates of analysis, and facilitating market access for South African manufacturers. Accreditation also provides a safeguard that accredited conformity assessment bodies are competent to provide testing, certification, and inspection services for manufacturers to prove compliance with international standards and methods for the acceptance of goods and services.

## Technical Expertise in Trade Negotiations

A final possible remedy tied to skills is the inclusion of technical experts in trade delegations who can speak to the technical issues that may arise in negotiations. This could be supplemented by the sourcing (or inclusion) of inputs from technical experts. For example, the Department of Agriculture, Forestry and Fisheries oversees food safety issues with NRCS support at the Codex level. By agreement with the EU's food and fishery authorities, NRCS is the competent authority to issue health guarantees for fish and fishery products from South Africa, highlighting how institutional capabilities have been used to facilitate trade through trade agreements. These examples illustrate how trade and technical cooperation agreements also support technical regulations and institutions; however, they are not as cost-effective as institutionally based relationships. MRAs work well in the voluntary (institution-based) market, however bilateral MRAs (between governments) can be explored through preferential trade agreements, when the mutual recognition can also be used to the benefit of local exporters.

## CONCLUSION

Greater regional trade could benefit SADC's socio-economic development. The common problems faced by member states in the region include high rates of unemployment and poverty, particularly among the low-skilled; large informal sectors; and, the need to diversify away from reliance on a handful of primary commodities.

Developing appropriate regional standards for goods and services based on internationally defined standards (when available) would benefit trade. Unlike other regions in Africa, Southern Africa has the advantage of a world class customs authority, testing bodies and accreditation services being already available in South Africa. Besides increasing reliance or linkages to this infrastructure, countries in the region could also consider steps towards implementing a regional framework for mutual recognition (agreements). In doing so conformity assessment procedures, for example, could be recognised in other countries to avoid repetitions in testing in the various regional markets, or having to invite foreign inspectors. For this to occur, countries would need to adjust their certification, accreditation and enforcement capacities to similar levels.

The first phase of the Tripartite Free Trade Area (TFTA) negotiations focuses on trade in goods. Such trade requires that goods comply with import rules and regulations, including the technical standards of importing countries. Some of these technical standards vary from country to country, sometimes creating TBTs and affecting the free flow of goods. To facilitate greater intra-Africa trade through the integration of the tripartite area into a single market, a well-functioning technical infrastructure system, underpinned by harmonised standards, is paramount.

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