A Study on the development strategy for expanding TBT

Yong-jae Kim

1) Author, Department of Business Administration, Korea Polytechnic University, Prof. Ph.D. Tel +82-31-8041-0676, Fax +82-31-8041-1307, E-mail: yjkim@kpu.ac.kr, Postal Code 429-793, 237, Sangi-daehak-ro, Siheungsi, Gyeonggido, Korea

Abstract

Purpose of this paper is to make the removal and easy TBT of smart city related goods such as IT, S/W, IOT, BigData, Home network between Korea and China. Research methodology is review 2nd data analysis and focus group interview (government officer, researcher, professor, and CEO of smart city related company). This paper compare & analyze the international rule & system as follow. First, it is to compare & analyze the smart city system, technical regulation, standard, test & certification procedure and inspection. Second, it is to review electric/electronic test, certification and calibration. Third, it is to analyze MRA between Korea and China, SDoc, Mutual Acceptance of International certification, and IEC CB scheme. This paper intends to draw conclusion and make implication as follows. First, we must promote FTA and MRA. Second, we make to remove and to easy TBT by MRA between Korea and China. Although the MRA is a system where all parties have concluded agreement enjoy the advantage, Korea is under a state of concluding only the stage 1 agreements (exchange test & certification document among countries) with 5 countries such as United States, Canada, Chile, Japan and Vietnam.

Keyword: WTO, TBT, FTA, MRA, Test, Certification

1. Introduction

Recent researches suggest that world economics declined 20 percent since last year and there is no sign for recovery. Due to the decrement, each country seems to limit TBT. However, Republic of Korea manages decrement in export to 7 to 8 percent by expanding market through FTA. This paper focuses on increasing amount of trade between other countries with FTA by establishing MRA between two countries which reduces export procedure and leads to increment in export.

In this study, the elimination strategy of TBT with aid of technical regulations or standards is excluded, and only the conformity assessment shall be considered as the strategic measure of eliminating TBT.

The measure for every membership country to accord with the international standards corresponding to their technical regulations and standards, is only to present TBT related Specific Trade Concern (STC) to WTO.

However, each of countries retains its own conformity assessment area, and measures to settle such differences are various as well. Therefore, it is likely required an appropriate level of harmonization in them to carry forward this scheme.

2. Research methodology

First, the paper made use of reviewing 2nd data analysis and focused on group interview, and then compared with analysis on the international rule and system such as smart city system, technical regulation, and standard through test certification procedure and inspection. Second, this paper reviewed electric/electronic test, certification, and calibration. Third, through analyzing MRA between Korea and China, the paper focused on SDoc, Mutual Acceptance of International certification, and IEC CB scheme. Although the MRA is a system where all parties that have concluded agreement enjoy the advantage, Korea is under a state of concluding only the stage 1 agreements (exchange test & certification document among countries) with 5 countries such as United States, Canada, Chile, Japan and Vietnam.

3. Definition of TBT Concept

3.1 Definition of TBT Concept

TBT is an abbreviation for ‘technical barrier to trade’ while this stands for the various in terms of trade that hinder the free movement of goods and services as the trading partner countries adopt and apply different Technical Regulations, Standards, Certification Procedures and Inspection Systems, etc. from each other. TBT agreement requires the membership countries to conform with the rules of ‘Harmonization’ and ‘Transparency’ when adopting Technical Regulations, Standards and Conformity Assessment. The rule of ‘Harmonization’ refers to where WTO membership countries enact and review the following technical regulations, standards and conformity assessment procedures in line with international standards. The rule of ‘Transparency’ is to reveal their operating standards and technical regulations, etc. based on enacted legislative purpose such as ISO, IEC, ITU and UNCEFACT.

3.2 Tools for Distribution of TBT

TBT makes the countries to harmonize technical regulations, standards or conformity assessments with the international standards and does not occur in case of being transparent. However, the fact is that TBT occurs if a specific country does not comply with the principles above during legislation and amendment of the laws related to technical regulations, standards or conformity assessments while STC must be submitted to settle this TBT. In the conformity assessment of ICT section, various methods of solution exist on TBT depending on the issue other than filing a lawsuit to WTO if a specific country operates the conformity assessment section differently from TBT(Kim, 2016).

As it is specified in the TBT agreement, the tests and the certification results implemented at the exporting country may be accepted through various channels. In other words, the tests and certification results implemented at the partner country may be recognized through the Mutual Recognition Agreement (hereinafter ‘MRA’) or the mutual acceptance plan of an internationally certified test report. Also, offshore manufacturers are able to present the conformity assessment results required by the partner country in a relatively easy way if SDoc system is introduced. Accordingly, this study intends to discuss the conclusion of MRA, introduction of SDoc on the conformity assessment system, mutual acceptance of internationally certified test report and test-certification infrastructure setup support, etc. as plans to actually eliminate the TBT due to the dissimilarity of conformity assessment. Such plan would conclude the MRA and also enable mutual acceptance of the internationally certified test report. Although the MRA is a...
system where all parties that have concluded agreement enjoy the advantage, Korea is under a state of concluding only the stage 1 agreements (exchange test & certification document among countries) with 5 countries such as United States, Canada, Chile, Japan and Vietnam (Kim, 2016).

4. Objective of Paper

4.1 Definition of Objective of Paper

The objective of this paper are as follows. First is the comparison & analysis of international standards such as ISO, IEC, ITU and UNCEFACT, KS and test certificates in relation to China's standard, testing and certification system support of Korean exporters.

Second is the MOU with Tsinghua University (assistance to Korean smart city companies’ export into China through standardization/ testing/ certification of smart city technology). Third is the MRAs between testing and certification organizations in Korea and China: Mutual recognition of test certificates, Assistance to Korean companies’ entry into China, etc. Finally, it is the propositions on relevant policies and guidelines for standard/testing/certification and MRAs with Chinese standardization and testing/certification organizations for acquisition of certification authority.

4.2 Key Drivers of Paper

In this paper, the key drivers of paper are as follows. First, Korea Polytechnic University and Tsinghua University co-founded a joint smart city R&D center in order to pass on Korea's unique smart city know how to the Guangdong Smart City Project and help Korean smart city companies enter into the Chinese market. Second is the participation in China's smart city projects and establishment of a joint smart city R&D center between Korea and China. Third is the 'Dongguan Innovation Center' which deals with formulation of policies, standards & bidding criteria and Analysis of a plan designed to control smart city management companies. Fourth is defining of the concept of smart city and Acquisition of success cases (transportation, logistics, procurement, standard, testing, certification, etc.). Fifth is the provision of Korea's smart city construction experiences and technology. Finally, it is the smart city project for metropolitan cities.

5. Scope of Paper

This paper is designed to establish a system for mutual recognition of trade & technology standards and testing/certification/calibration standards between Korean and China to support Korean exporters accordingly. Comparison analysis of Chinese and Korean standard/testing/certification/calibration systems. First scope is to make propositions on relevant policies and guidelines for standard/testing/certification/calibration. Second scope is to do research on collaboration plans and guidelines for industrial standards and testing/certification/calibration. Third scope is to formulate a policy and an action plan designed to resolve Korean exporters’ difficulties associated with Chinese standard/certification systems. Fourth scope is to formulate and execute standard/testing/certification/calibration policies through analysis of related difficulties. Fifth scope is to enter into MRAs for acquisition of testing/certification authority. In those countries like Europe or the US where standardization has been stabilized for years, lower-level standards evolve into national standards. Then, such national standards are acknowledged as local standards or international standards. That is, a bottom-up evolvement results in a virtuous cycle.

6. Results of paper

6.1 Strategy of Remove/ease TBT

The paper strategy are as follows. It is to make propositions on relevant policies & guidelines for standard/testing/certification, research on action plans and guidelines for industrial standards and testing/certification, research & analyze on Korean exporters’ difficulties & issues associated with Chinese standard/certification systems, formulate & execute standard/testing/certification policies through analysis of related difficulties, establish foundation for the acquisition of authority for testing and certification, perform simulation-based deduction of success cases & failure cases of Korean exporters as well as have success case study (Kim, 2016).

6.2 Comparative Analysis(Figure 1)s between TBT distribution Tools

The systems mentioned above have different characteristics from each other. If the comparative analysis is performed from the perspectives of scope of effect, intensity of effect and usage status in Korea, they can be summarized as follows.
[Figure ] Comparative Analysis of Characteristics between TBT distribution Tools

<table>
<thead>
<tr>
<th>Scope of Effect</th>
<th>SDoC</th>
<th>Mutual Acceptance of International Certification</th>
<th>MRA</th>
<th>Infrastructure Setup Support Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>All countries</td>
<td>Participating countries</td>
<td>Participating countries</td>
<td>Partner country of agreement</td>
<td>Beneficiary countries</td>
</tr>
<tr>
<td>Limited to the products that have applied the system</td>
<td>By accepted field</td>
<td>By accepted field</td>
<td>In stages</td>
<td>Different according to the supported standard</td>
</tr>
<tr>
<td>Applied to the products with low level of harm</td>
<td>Field of private sector standards</td>
<td>EMC field is not used</td>
<td>Completed stage 1 conclusion and negotiating with a number of countries</td>
<td>Under support</td>
</tr>
<tr>
<td>Necessity to extend applied products is low in a short run</td>
<td>Handle flexibly depending on the acceptance situation of foreign countries</td>
<td>Handle flexibly depending on the acceptance situation of foreign countries</td>
<td>Need to promote upper stage with more countries</td>
<td>Need to extend support</td>
</tr>
</tbody>
</table>

Although the MRA is a system where all parties that have concluded agreement enjoy the advantage, Korea is under a state of concluding only the stage 1 agreements (exchange test & certification document among countries) with 5 countries.

8. Conclusion

In this study, the elimination strategy of TBT with aid of technical regulations or standards is excluded, and only the conformity assessment shall be considered as the strategic measure of eliminating TBT.

This paper intends to draw conclusions and make policy implications as follows. First, we must promote a multi-track simultaneous agreements with the countries that have necessity of short-term promotion. Second, the countries with necessity of short-term promotion on the preferential basis are China, Japan, USA, Vietnam and India, etc. Third, it is necessary to conclude agreement with the leading countries among the countries of Middle East and Central America on the preferential basis. It is necessary to prepare negotiation on the preferential basis with Saudi Arabia or Iran, etc. with large trading scale among the countries of Middle East and conclude agreement on the preferential basis with Brazil with large trading scale which is playing a role of leading country in the region among the countries of Central America. Fourth, support on the countries that have not fully prepared the conformity assessment system needs to be gradually extended. However, the method of support on these countries also must vary depending on the country.

Although this paper presents method of increasing export using MRA, it lacks in presenting MOU and MRA follow-up procedures for each test laboratory and between them. Future topics include MRA follow-up and ARSO, GSO, COPANTec.

References


