

Country Name	<b>Project on Strengthening the System and Operation on Standards and Conformance</b>
Socialist Republic of Viet Nam	

**I. Project Outline**

Background	Viet Nam was facing a need to intensify efforts in standards and conformity assessment to remove technical barriers to trade (TBT), participate in the international market and attract foreign direct investment. In particular, ensuring the quality of electrical and electronic (EE) equipment was important for its high export potential and consumers' safety. However, the standards and conformance system in the field of EE equipment was developing and not adequately operated.		
Objectives of the Project	Through training and technical advice in policy planning, developing standards/regulations, accreditation, certification, and testing, the project aimed at strengthening the system and operation of organizations in charge of standards and conformance for EE equipment in Viet Nam, thereby improving the quality of EE equipment manufactured in Viet Nam and ensuring the consumers' safety.  1. Overall Goal: The quality of electrical and electronic equipment manufactured in Viet Nam is improved, and the consumers' safety is ensured. 2. Project Purpose: The system and operation of the Directorate for Standards, Metrology and Quality (STAMEQ) and other related organizations on standards and conformance in the field of electrical and electronic equipment are strengthened.		
Activities of the Project	1. Project site: Hanoi and Ho Chi Minh 2. Main activities: Training and technical advice in policy planning, developing standards/regulations, accreditation, certification, and testing 3. Inputs (to carry out above activities) * As of Terminal Evaluation in Nov. 2012 Japanese Side 1) Experts: 19 persons 2) Trainees received: 45 persons 3) Equipment: laboratory equipment, etc. 4) Local expenses Viet Nam Side 1) Staff allocated: counterpart personnel from the implementing agencies (number not specified) 2) Office space in Hanoi and Ho Chi Minh 3) Local expenses		
Project Period	November 2009 – April 2013	Project Cost	(ex-ante) 350 million yen (actual) 342 million yen
Implementing Agency	Directorate for Standards, Metrology and Quality (STAMEQ), Ministry of Science and Technology (MOST) and the following related organizations under MOST: Vietnam Standards and Quality Institute (VSQI); Bureau of Accreditation (BOA); Vietnam Certification Center (QUACERT); Quality Assurance and Testing Center (QUATEST1); and QUATEST 3		
Cooperation Agency in Japan	Ministry of Economy, Trade and Industry		

**II. Result of the Evaluation**

## &lt;Constraints on Evaluation&gt;

- The evaluation judgment on Effectiveness/Impact and Sustainability was made based on the limited information available from the implementing agencies.

## &lt; Special Perspectives Considered in the Ex-Post Evaluation &gt;

- Assessing Continuation Status of Effectiveness: Since the Indicator for the Project Purpose is not specific enough, this ex-post evaluation used selected indicators of Outputs for assessment of the status of the continuation of project effects.
- Assessing Achievement Status of Overall Goal: (1) (Target year) The project design matrix (PDM; a matrix representing the project framework) does not mention the target year for the Overall Goal. Since the Ex-ante Evaluation Report states that the ex-post evaluation would be conducted in three to five years after project completion, this ex-post evaluation interprets that the ex-ante evaluation would have supposed the target year for the Overall Goal to be 2018, five years after project completion in 2013.  
(2) (Target value) PDM does not mention the target values for the quantitative indicators. This ex-post evaluation judged each indicator “mostly achieved” when the actual value increased.

**1 Relevance**

## &lt;Consistency with the Development Policy of Viet Nam at the Time of Ex-Ante Evaluation and Project Completion&gt;

This project was consistent with the Viet Nam's development policies at the times of both ex-ante evaluation and project completion, such as “Socio-Economic Development Strategy (SEDS)” (2001-2010) and SEDS (2011-2020) that both hold at the front its vision/general objective of becoming basically an industrialized country by 2020. Also, MOST was implementing “National Program on Enhancing Productivity and Quality of Products, Goods produced by Vietnamese Enterprises to the Year 2020” (2010-2020).

## &lt;Consistency with the Development Needs of Viet Nam at the Time of Ex-Ante Evaluation and Project Completion &gt;

The project was consistent with the Viet Nam's development needs at the time of ex-ante evaluation as described in “Background” above. The need continued to the time of project completion as STAMEQ and other related organizations remained relevant as being responsible for the standards and conformance system.

## &lt;Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation&gt;

“Country Assistance Program for Viet Nam” (2009) holds “Promotion of Economic Growth and Strengthening of International Competitiveness” as one of its four priority areas.

## &lt;Evaluation Result&gt;

In light of the above, the relevance of the project is high.

## 2 Effectiveness/Impact

### <Status of Achievement of the Project Purpose at the time of Project Completion>

The project purpose was achieved by the time of project completion. Based on the strengthened activities of the counterpart organizations in developing standards (by VSQI), accreditation (by BOA), certification (by QUACERT), and testing (by QUATEST1 in Hanoi and QUATEST3 in Ho Chi Minh), the ex-post evaluation supports the Terminal Evaluation's view that STAMEQ and other related organizations showed the notable improvement of their capabilities on standards and conformance as compared with international standards and recommendations. STAMEQ became the national member body of the IEC System of Conformity Assessment Schemes for EE Equipment and Components (IECEE) in 2012. The project completed documentation for application for the IECEE Certification Body (IECEE/CB) in which QUACERT was expected to become a National Certification Body (NCB) and QUATESTs to become Certification Body Testing Laboratories (CBTLs).

### <Continuation Status of Project Effects at the time of Ex-post Evaluation>

The project effects have continued to the time of ex-post evaluation. The information collected from the implementing agencies show that the standard and conformance system strengthened under this project continues to be operating or further expanded in scope by the counterpart organizations (see the table below). However, the application for the IECEE/CB Scheme did not take place after project completion as the Vietnamese side has not designated QUACERT as an NCB yet due to political and diplomatic considerations, though it continues to be the Viet Nam's main certification body. Accordingly, QUATEST1 and QUATEST3 (Electricity Testing Laboratory) have not yet applied for CBTLs<sup>1</sup>. Nevertheless, this issue may not largely affect the degree of continuation of project effects as it is a small portion among the project Outputs.

### <Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

Achievement for the Overall Goal at the time of ex-post evaluation is unverifiable since sufficient information to verify the indicators (on improved quality of Viet Nam-made EE equipment and related consumers' safety) is not available. Regarding claims caused by EE equipment (Indicator 1), the number of claims received by QUATEST3 decreased from 2016 to 2017, while the number is generally larger after project completion than during project implementation reportedly as it has wider variety of testing services, which makes it difficult to use this indicator for judging the achievement status of the Overall Goal. No information on the other Indicators is available.

### <Other Impacts at the time of Ex-post Evaluation>

No negative impacts of the project were confirmed.

### <Evaluation Result>

Therefore, the effectiveness/impact of the project is fair.

### Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results																
(Project Purpose) The system and operation of the STAMEQ and other related organizations on standards and conformance in the field of electrical and electronic equipment are strengthened.	Improvement of capabilities of STAMEQ and other related organizations on standards and conformance as compared with international standards and recommendations	<p>Status of the Achievement: achieved (mostly continued)</p> <p>(Project Completion)</p> <ul style="list-style-type: none"><li>Standards development capacity: The number of Viet Nam national standards (TCVN) developed by VSQI based on the latest International Electrotechnical Commission (IEC) standards increased from 52 in 2008 to 80 in 2013.</li><li>Accreditation capacity: The scope of accreditation for EE testing laboratories and electro-magnetic compatibility (EMC) testing laboratories by BOA was enhanced by using the equipment provided under this project. BOA also obtained a member status with Product Certification sector at Pacific Accreditation Cooperation (PAC) Multilateral Recognition Arrangement (MLA) in addition to its existing member status with Management System sector.</li><li>Certification capacity: The number of product certificates issued by QUACERT was accumulated from 259 (55 EE products) in 2009 to 621 (85 EE products) in 2012. Preparation of documentation for application for the IECEE/CB Scheme was completed.</li><li>Testing capacity: QUATEST1 and QUATEST3 became able to execute tests on all of the 13 mandatory EE equipment using the equipment provided under this project. As for QUATEST3, both the range and field of testing have been enhanced not only for 13 mandatory products but for similar products as well. The number of testing services offered for EE products increased (see the table below).</li></ul> <p>(Ex-post Evaluation)</p> <ul style="list-style-type: none"><li>VSQI has improved the relations with entities at home and abroad, thus enhancing the status of a national quality inspector (e.g., it has annually organized seminars on TCVN application for all stakeholders, including State management entities, enterprises, sector clusters under the framework of “National Program on Enhancing Productivity and Quality of Products, Goods produced by Vietnamese enterprises to the year 2020” and with funding from UNEP, International Copper Alliance and Australia). The stable number of TCVN is published each year, and the TCVN developed so far is operating.</li></ul> <p>Number of TCVNs published Each year</p> <table><tr><th>2008</th><th>2011</th><th>2012</th><th>2013</th><th>2014</th><th>2015</th><th>2016</th><th>2017</th></tr><tr><td>52</td><td>45</td><td>92</td><td>80</td><td>69</td><td>69</td><td>68</td><td>74</td></tr></table> <ul style="list-style-type: none"><li>BOA continues to be a member of PAC MLA in Product Certification Sector. In addition, it</li></ul>	2008	2011	2012	2013	2014	2015	2016	2017	52	45	92	80	69	69	68	74
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<sup>1</sup> QUATEST3 has been preparing document to register as a CBTL under Korea Testing Laboratory (KTL), which is an NCB of Korea.

		<p>expanded its scope to PAC MLA for Global Gap (2015) and Environmental Management Systems (2016).</p> <ul style="list-style-type: none"><li>QUACERT continues to be the Viet Nam’s main certification body. However, application for the IECEE/CB Scheme has not yet been done.</li></ul> <p>Accumulated number of product certificates by QUACERT</p> <table><tr><td></td><td>2009</td><td>2011</td><td>2012 (-Oct)</td><td>2013</td><td>2014</td><td>2015</td><td>2016</td><td>2017</td></tr><tr><td>Total cumulative</td><td>259</td><td>450</td><td>621</td><td>1,588</td><td>1,725</td><td>1,950</td><td>1,930</td><td>1,816</td></tr><tr><td>Of which EE products</td><td>55</td><td>88</td><td>90</td><td>618</td><td>408</td><td>289</td><td>563</td><td>682</td></tr></table> <ul style="list-style-type: none"><li>QUATEST1 and QUATEST3 have kept or further expanded the scope of testing.</li></ul> <p>Number of testing services offered for EE products</p> <table><tr><td></td><td>2009</td><td>2011</td><td>2012</td><td>2013</td><td>2014</td><td>2015</td><td>2016</td><td>2017</td></tr><tr><td>QUATEST1 (mandatory 13 EE equipment)</td><td>5,774</td><td>8,798</td><td>13,500</td><td>3,519</td><td>3,626</td><td>3,707</td><td>3,421</td><td>3,125</td></tr><tr><td>QUATEST3 (mandatory 13 EE equipment), including</td><td>4,110</td><td>9,652</td><td>8,582</td><td>8,838</td><td>9,712</td><td>9,658</td><td>10,018</td><td>10,110</td></tr><tr><td>- Electricity cable sample testing</td><td>4,100</td><td>4,200</td><td>4,315</td><td>4,450</td><td>4,605</td><td>4,788</td><td>4,856</td><td>4,803</td></tr><tr><td>- Household electricity sample testing</td><td>10</td><td>5,452</td><td>4,267</td><td>4,388</td><td>5,107</td><td>4,870</td><td>5,162</td><td>5,307</td></tr></table> <p>Note: The reason why the number decreased at QUATEST 1 in 2013 and thereafter is emergence of other testing entities under local governments such as under local department of science and technology.</p>		2009	2011	2012 (-Oct)	2013	2014	2015	2016	2017	Total cumulative	259	450	621	1,588	1,725	1,950	1,930	1,816	Of which EE products	55	88	90	618	408	289	563	682		2009	2011	2012	2013	2014	2015	2016	2017	QUATEST1 (mandatory 13 EE equipment)	5,774	8,798	13,500	3,519	3,626	3,707	3,421	3,125	QUATEST3 (mandatory 13 EE equipment), including	4,110	9,652	8,582	8,838	9,712	9,658	10,018	10,110	- Electricity cable sample testing	4,100	4,200	4,315	4,450	4,605	4,788	4,856	4,803	- Household electricity sample testing	10	5,452	4,267	4,388	5,107	4,870	5,162	5,307
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(Overall Goal) The quality of electrical and electronic equipment manufactured in Viet Nam is improved, and the consumers' safety is ensured.	1) Decrease in the number of claims caused by electrical and electronic equipment	(Ex-post Evaluation) not achieved Number of claims caused by EE equipment received by QUATEST1: Every year, QUATEST1 receives a number of claims of EE products. However, those claims and explanation by QUATEST1 are done verbally, rather than being recorded in written forms. Hence, no specific numbers are available. Number of claims caused by EE equipment received by QUATEST3 <table><tr><td>2013</td><td>2014</td><td>2015</td><td>2016</td><td>2017</td></tr><tr><td>190</td><td>299</td><td>1,484</td><td>2,327</td><td>1,704</td></tr></table>	2013	2014	2015	2016	2017	190	299	1,484	2,327	1,704																																																														
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2) Increase in the amount of export of domestic manufacturers in the field of electrical and electronic equipment	(Ex-post Evaluation) not verifiable Data is not available.																																																																									
3) Increase in the share of CR marked products at designated marketplaces	(Ex-post Evaluation) not verifiable Data is not available.																																																																									

Source: Terminal Evaluation Report; Questionnaire to the implementing agencies; Interviews with QUATEST1 and QUATEST3.

### 3 Efficiency

Both the project cost and the project period were within the plan (ratio against the plan: 98% and 100%). The Outputs of the project were produced as planned. Therefore, the efficiency of the project is high.

### 4 Sustainability

#### <Policy Aspect>

"National Program on Enhancing Productivity and Quality of Products, Goods produced by Vietnamese Enterprises to the Year 2020" is still effective at the time of ex-post evaluation.

#### <Institutional Aspect>

No problem is found in the organizational structure, which has not experienced major changes since project completion. The current number of staff of the counterpart organizations is generally larger than the numbers as of 2012. Those staff meets the need and are capable enough to do given tasks.

#### <Technical Aspect>

As mentioned in "Continuation Status of Project Effects at the time of Ex-post Evaluation" above, each of the related organizations have maintained or further expanded their functions, which indicates their sufficient skills to promote the standards and conformance system for EE equipment. Both QUATEST1 and QUATEST3 have frequently utilized the materials on testing developed under this project. QUATEST3 has issued the mechanism, regulations and guidance on training, plan formulation annually. It has always organized training, seminars, workshops and meetings on training, maintenance and enhancing technological training for staff, experts in conformity and standards for EE equipment. Also, QUATEST1 and QUATEST3 have frequently exchanged views, testing skills to maintain testing results, i.e., testing skills, testing process, testing and comparison. No problem was found on operation and maintenance of the laboratory equipment provided under this project.

#### <Financial Aspect>

None of the counterparts provided clear financial data on yearly basis for expenditure needed for operations of standard and

Number of staff allocated		
	Oct.2012	2018
MOST	300	290
BOA	26	30
STAMEQ	118	200
QUACERT	102	100
QUATEST1	133	166
QUATEST3	500	625
VSQI	75	80

Source: Each organization

conformance system. In replace of that, QUATEST1 informed about the budget for the three years from 2015 to 2017. This center spends over 100 million VND/ year on average on operation and maintenance (O&M) for all kinds of testing equipment. Most of QUATEST1's equipment has been maintained and adjusted by its own laboratories. Hence, QUATEST1 has not paid much to other laboratories for O&M tasks. For QUATEST3, those numbers range from 500 million to 1 billion VND/ year from its permanent spending source for O&M tasks. This fund has been created based on the business activities by QUATEST3 on its own, rather than taking from annual fund of State budget. STAMEQ, on the other hand, has actively participated in a wide range of training and organizing thematic workshops, seminars on operations of standard and conformance. STAMEQ has closely cooperated with many international partners to realize the above work. Those are Korean Agency on Standard and Technology, ASEAN- Joint Sectorial Committee for Electronic Equipment, APEC- Subcommittee on Standard and Conformance, Japan- Joint Sectorial Committee for Electronic Equipment.

Based on above information, interview results, site visits observation, it is fair to say that certain budget is allocated considering the continued operation of the standard and conformance system by the major counterpart organizations as mentioned in “Effectiveness/Impact” above.

<Evaluation Result>

Therefore, the sustainability of the effects through the project is high.

5 Summary of the Evaluation

The project achieved its Project Purpose (strengthening of the system and operation of related organizations on standards and conformance in EE equipment) upon project completion and the effects have continued to the time of project completion. The Overall Goal (improved quality of Viet Nam-made EE equipment and consumers' safety) is not verifiable due to unavailability of most of the necessary data. For the sustainability, no problems are observed in all of the policy, institutional, technical, and financial aspects.

Considering all of the above points, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Lessons learned for JICA:

Timely revision of the PDM:

It is relatively popular that when PDM was designed at the project's preparation/start, all stakeholders are very optimistic on the project's outputs, goals achievement. However, during the project's implementation, it turned out that there are many factors affecting the project's goals and outputs. If no timely revision, amendment are made to PDM, during the project's life and upon its completion, to make the outputs, goals really realistic, the project evaluation in the future cannot properly reflect the actual status and reasons behind the failure or success. In case of this project, this situation took place due to the judgment of the Overall Goal status.



Equipment provided to QUATEST 3



Equipment provided to QUATEST 3