

Evaluation Grid: The Project on Electrical and Electronic Appliances Testing in the Republic of the Philippines

Evaluation Question	Evaluation Items	Information, Data	Source of Information	Means of Verification	Remarks
A. Achievement of the Project	Level of achievement of Overall Goal	A-1-1. Decrease in failure rate of items tested	ANNEX 7	Review of materials	The Philippine and the Japanese sides have confirmed that significant decrease in failure rate of tested items have been recorded.
	A-1. The safety of the electrical and electronic appliances in the market of the Republic of the Philippines will be improved.	A-1-2. Increase of certified electrical and electronic appliances in the market			
Level of achievement of Project Purpose	A-2. BPS will be able to provide appropriate technical service in the field of electrical and electronic appliances testing.	A-2-1. The number of the kinds of the testable electric and electronic appliances	ANNEX 9 ANNEX 10	Review of materials	The Philippine and the Japanese sides have confirmed that the number of kinds of testable electric and electronic appliances have increased.
		A-2-2. The number of testing	ANNEX 9 ANNEX 10	Review of materials	The Philippine and the Japanese sides have confirmed the data.
		A-2-3. The days taken for appliance testing	ANNEX 11-1, 11-2	Review of materials	The Philippine and the Japanese sides have confirmed the data.
		A-2-4. The bottlenecks of the testing process	Long-term experts, C/P	Interview	The Philippine and the Japanese sides have confirmed that due to the increase in testing demand, the number of testing appliances and the limited space of the BPSTC premises, there occasionally happens a queue for some testing.

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A. Achievement of the Project		A-2-5. The days taken for the issuance of certificates for passed appliances	C/P, Project Director, Project Manager, and Long-term experts ANNEX 44-1, 44-2	Interview Review of the materials	The Philippine and the Japanese sides have confirmed that it takes 2 days on an average for the BPS to issue a certificate after acceptance of documents of a passed appliance from the BPSTC.
	Level of achievement of outputs of the project A-3. Project operation unit will be enhanced.	A-3-1. The transparency of decision making process of the project director and the project manager regarding budget allocation, and the purchase of equipment to the C/P	ANNEX 22 ANNEX 13-1, 13-2, 16 ANNEX 15 BPS (Director, Assistant director), BPSTC Director, Long-term experts	Review of the materials Interview	The Philippine and the Japanese sides have confirmed that the project manager and C/P have a weekly meeting to secure transparency of the decision making process. There are two levels of meeting, namely BPS executive committee composed of AT Heads (Action Team Heads) and meetings at an operational level between the Project Manager and the C/P. The Flat organization of the BPS highly contributes to good communication among the Project Director, the Project Manger and the C/P.
		A-3-2. The activities of the Joint Coordinating Committee	BPS Director (Project Director), Assistant director, Project manger Long-term experts The list of the JCC members	Interview	The Philippine and the Japanese sides have confirmed that holding a the JCC meeting composed of the members from the electrical/electronic industry groups and the BPS enables the project to receive advise and assistance from the electrical/electronic industry group.
		A-3-3. The control ability of the Project Director and the Project Manager	Project Director, Project Manager, C/P and Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that the control ability of the Project Director and the Project Manager is very high and the C/P highly appreciate their management ability of the project.

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A. Achievement of the Project		A-3-4. The action of the higher decision making body to decisions made by BPSTC	BPS Director (Project Director), Assistant director, C/P, Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that the action of the higher decision making body to decisions made by the BPSTC is prompt and appropriate.
		A-3-5. The approaches of BPSTC for problem solving	Project Director, Project Manger C/P, Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that the approaches of the BPSTC for problem solving are prompt and appropriate.
	A-4. The machinery and equipment related to electrical and electronic appliances testing will be provided, installed, operated and maintained properly.	A-4-1. The budget allocation for the operation and maintenance of the equipment	ANNEX 33	Review of the materials	The Philippine and the Japanese sides have confirmed the budget allocation for the operation and maintenance of the equipment. The BPS will put up a CAF (Certification for Availability of Funds) on the cost of equipment calibration from PFY 2003.
		A-4-2. Contents and number of equipment provided by the Philippine side	ANNEX 32	Review of the materials	The Philippine and the Japanese sides have confirmed the list.
		A-4-3. Contents and number of equipment provided by the Japanese side	ANNEX 36-1 ANNEX 37-1	Review of the materials	The Philippine and the Japanese sides have confirmed the list.
		A-4-4. Contents and number of reference and manuals purchased and developed	ANNEX 19-1, 19-2, 20	Review of the materials	The Philippine and the Japanese sides have confirmed the list.
		A-4-5. Route to get spare parts and situation to secure them	ANNEX 21-1 ANNEX 21-2	Review of the materials	The Philippine and the Japanese sides have confirmed that there is no inventory for spare parts of the equipment, but the BPS keeps the list of spare parts supplier updated and has an inventory of consumable items.

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A. Achievement of the Project	A-5. Testing of main electrical and electronic appliances will be able to be implemented by counterpart personnel (C/P).	A-5-1. Number of testable electrical and electronic appliances	ANNEX 23-1, 23-2, 23-3	Review of the materials	The Philippine and the Japanese sides have confirmed the tables and figures.
		A-5-2. The utilization of the equipment	ANNEX 24	Review of the materials	The Philippine and the Japanese sides have confirmed the list.
		A-5-3. Manuals, textbooks, and training materials developed Paper tests, test reports and test data sheets	ANNEX 25	Review of the materials	The Philippine and the Japanese sides have confirmed the list.
		A-5-4. The test results by the final evaluation team	ANNEX 51	Test	The Philippine and the Japanese sides have confirmed that the test results of the C/P reached the goal set by the Japanese technology transfer planning members of the final evaluation team.
	A-6. Seminars and training courses related to electrical and electronic appliances testing will be implemented systematically.	A-6-1. Number of textbooks and teaching materials developed	ANNEX 27	Review of the materials	The Philippine and the Japanese sides have confirmed the list.
		A-6-2. Number of seminars and training courses implemented inside and outside of the project site	ANNEX 28-1, 28-2, 28-3	Review of the materials	The Philippine and the Japanese sides have confirmed the list.
		A-6-3. The feedback of requests and comments from the trainees who attended the seminars and training courses	ANNEX 29-1, 29-2, 29-3 Project Manager, C/P, Long-term experts	Review of materials Interview	The Philippine and the Japanese sides have confirmed the figures.
		A-6-4. The utilization of the feedback on the skill and knowledge obtained from the trainees who attended the seminars and training courses	The questionnaire to the trainees Project Manager, C/P, Long-term experts	Review of the answers Interview	The Philippine and the Japanese sides have confirmed that the BPSTC started to develop visual materials for the seminars and training courses as a result of feedback from the trainees.

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A. Achievement of the Project	A-7. Results of Activities	A-7-1. APO and activity results	ANNEX 5-1, 5-2, 5-3, 5-4 Project Manager, Long-term experts	Review of materials Interview	The Philippine and the Japanese sides have confirmed the APO and activity results.
	A-8. Improvement of indirect C/P in testing technology	A-8-1. The comments of the direct C/P	Direct C/P	Interview	The Philippine and the Japanese sides have confirmed that the direct and indirect C/P have a weekly meeting for the direct C/P to transfer technology they have obtained from the Japanese long-term and short-term experts. This has been working very well and they plan to continue to practice this even after the termination of the project.
		A-8-2. The self-evaluation of the indirect	Indirect C/P	Interview	The Philippine and the Japanese sides have confirmed that the indirect C/P highly appreciate a weekly session they have with the direct C/P and many of them feel that they learn a lot from the direct C/P. Some commented that after having had this session with the direct C/P, it became much easier for them to understand the technical documents forwarded from the BPSTC.

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B. Implementation Process	B-1. Progress of activities	B-1-1. APO and activity results	ANNEX 5-1, 5-2, 5-3, 5-4 Project Manager, Long-term experts, C/P	Review of materials Interview	The Philippine and the Japanese sides have confirmed the results.
	B-2. Monitoring status	B-2-1. Implementation of monitoring	Monitoring reports ANNEX 38	Review of materials	The Philippine and the Japanese sides have confirmed that monitoring of the project has been regularly conducted in consultation between the Philippine and the Japanese side and reports have been submitted to the JICA Tokyo headquarters.
		B-2-2. Revision history of the PDM and APO	Project Manager, C/P, Long-term experts	Interview	The PDM and APO have been revised in consultation between the Philippine side and the Japanese side when needed and the latest version of them are attached in the Annex.
		B-2-3. Change of the important assumptions	Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that there has been no change in the important assumptions.
	B-3. The appropriateness of the communication between the Japanese Experts and the C/P	B-3-1. The frequency of the communication	C/P, Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that the Japanese long-term experts and short-term experts have communicated with the direct C/P daily and the indirect C/P occasionally when needed. The Japanese experts have a weekly meeting with the direct C/P and the Chief Advisor has a high-level meeting with the Project Director every 3 months along with irregular meetings held when needed.

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B. Implementation Process		B-3-2. The change of awareness, and behavior of C/P towards their work	C/P, Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that the C/P have been influenced a great deal by the Japanese long-term experts and short-term experts in the way they work in a positive way and they are highly motivated.
	B-4. The appropriateness of the technology transfer methods	B-4-1. The policy of the technology transfer	C/P, Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that the policy of technology transfer has been appropriate.
		B-4-2. The special consideration on technology transfer	Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that there have been three special considerations the Japanese experts have had in mind in the course of implementing their technology transfer to the C/P as below. (1) The Japanese experts have put a special emphasis on the ability to utilize references and manuals to solve problems rather than memorizing things. (2) The Japanese experts have tried to give the C/Ps sufficient time to familiarize themselves to the testing equipment to learn how to operate them. (3) The Japanese experts have initiated a weekly activity report from the C/P to the Japanese experts. This weekly report works well for the C/Ps to manage themselves and understand the problems they encounter in the course of technology transfer.

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B. Implementation Process	B-5. Responsibilities of BPS and BPSTC	B-5-1. The degree of involvement of the project director and the project manager to the project	Project Director, Project Manager C/P, Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that both the project director and the project manager have committed themselves to the project in their best capacity.
		B-5-2. Local cost on the Philippine side	ANNEX 33 Project Director, Project Manager Long-term experts	Review of materials Interview	The Philippine and the Japanese sides have confirmed that the Philippine side takes full responsibility for the local cost agreed upon in the R/D.
		B-5-3. The appropriateness of C/P allocation	Project Director, Project Manager C/P, Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that the allocation of the C/P has been appropriate.

Evaluation Question	Evaluation Items	Information, Data	Source of Information	Means of Verification	Remarks
1. Relevance	1-1. The relevance of the overall goal to the industrial policy of the Philippines	1-1-1. National Development Plan	ANNEX 39 BPS Director (Project Director), Assistant director	Review of the materials Interview	The Philippine and the Japanese sides have confirmed that the overall goal is in conformity with the national development plan of the Philippines.
		1-1-2. National Industrial Policy	ANNEX 40 BPS Director (Project Director), Assistant director	Review of the materials Interview	The Philippine and the Japanese sides have confirmed that the overall goal is in conformity with the national industrial policy of the Philippines.
	1-2. The relevance of the project purpose to the overall goal and the needs of BPSTC	1-2-1. National Industrial Policy	ANNEX 40 BPS Director (Project Director), Assistant director	Review of the materials Interview	The Philippine and the Japanese sides have confirmed that the project purpose to the overall goal and the needs of the BPSTC is in conformity with the national industrial policy of the Philippines.
		1-2-2. The needs of the electrical and electronic associations	The questionnaire to the electrical and electronic associations	Review of the answers	The Philippine and the Japanese sides have confirmed that the electrical and electronic associations strongly support the activities of the BPSTC and expect it to have a bigger capacity for electrical and electronic appliances testing.

Evaluation Question	Evaluation Items	Information, Data	Source of Information	Means of Verification	Remarks
1. Relevance	1-3. The relevance of planning The relevance of planning in connection with the overall goal, outputs of the project, and inputs to the project	1-3-1. The demand for electrical and electronic appliances testing	ANNEX 9 ANNEX 10	Review of the materials	The Philippine and the Japanese sides have confirmed that the demand for electrical and electronic appliances testing has been increasing and the Philippine side will undertake accreditation of private testing laboratories to conduct the above testing for collecting data while retaining its prerogative of issuing certificates to fill the lack of testing capacity at the BPSTC.
		1-3-2. The demand for seminars and training courses	ANNEX 29-1, 29-2, 29-3	Review of the materials	The Philippine and the Japanese sides have confirmed that the demand for seminars and training courses have significantly increased and the BPSTC finds it hard to fulfill all the requests with the present human resources. The BPS places its seminars and training courses as trainer's trainings and plans to train people in cooperation with industry associations to expand the range of trained people in the field of electrical and electronic appliances testing.
	1-4. The relevance of this project in the light of ODA policy of Japan	1-4-1. The ODA policy of Japan to the Republic of Philippines	ODA policy of Japan to the Republic of Philippines (MOFA) ODA project plans to the Republic of Philippines (JICA)	Review of the materials	The Japanese side explained that the ODA policy of Japan to the Republic of Philippines to the Philippine side. The Philippine and the Japanese sides have confirmed that the project is in conformity with the above-mentioned policy.

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2. Effectiveness	2-1. Level of achievement of Project Purpose	2-1-1. The stable supply of utilities such as electricity, gas, water, and so on to the project site	Project Manager, Long-term Experts Site observation	Interview Observation	The Philippine and the Japanese sides have confirmed that the utilities at the BPSTC are sufficient.
		2-1-2. The availability of the present BPSTC premises within and after the period of the project.	Project Director, Project Manager, Long-term experts Site observation	Interview Observation	The Philippine and the Japanese sides have confirmed that the BPSTC can use the present testing center premises as long as the BPS needs.
		2-1-3. The stability of the C/P	Project Director, Project Manager, Long-term experts, C/P ANNEX 14	Interview Review of the materials	The Philippine and the Japanese sides have confirmed that the stability of the C/P is very high and they take pride in their work and tend to stay long.
		2-1-4. The policy of the Government of the Philippines to harmonize the Philippine National Standard with the international IEC Standard.	BPS Director (Project Director), Assistant Director Long-term Experts	Interview	The Philippine and the Japanese sides have confirmed that the policy of the Government of the Philippines to harmonize the Philippine National Standard with the international IEC Standard has been implemented and the majority of the Philippine National Standards are in line with the international IEC standards at present. The BPS has systematized the process from preparing standards to propagating them.
		2-1-5. The possibility of drastic deregulation on electrical and electronic appliances testing	BPS (Director, Assistant director)	Interview	The Philippine and the Japanese sides have confirmed that there has not been drastic deregulation on electrical and electronic appliances testing and there is no plan as such in the future.

Evaluation Question	Evaluation Items	Information, Data	Source of Information	Means of Verification	Remarks
2. Effectiveness		2-1-6. The improvement of the manufacturing technology of private electrical and electronic companies	The questionnaire for manufacturers Long-term experts, Manufacturers	Review of the answers to the questionnaire for manufacturers Interview	The Philippine and the Japanese sides have confirmed that manufacturers of electrical and electronic appliances highly appreciate the services of the BPSTC and they feel that their awareness to the safety has been improved. Some manufacturers report that in their efforts to have their products passed in the BPSTC testing, there have been improvement and renovation of their manufacturing facilities brought about.
		2-1-7. The assurance of the support and cooperation from domestic industries	The questionnaire to the electrical and electronic associations ANNEX 47	Review of the answers and materials	The Philippine and the Japanese sides have confirmed that the Philippine Product Safety and Quality Foundation assures cooperation from domestic industries.
		2-1-8. The continuously stable politics and economics of the Republic of Philippines	BPS (Director, Assistant director)	Interview	The Philippine and the Japanese sides have confirmed that there has not been instability of politics and economics of the Republic of Philippines that may affect the project.
		2-1-9. The continuation of the policies with the emphasis on establishing electrical and electronic appliances sector and its safety	BPS (Director, Assistant director)	Interview	The Philippine and the Japanese sides have confirmed that the policies with the emphasis on establishing electrical and electronic appliances sector and the assurance of product safety have been consistent and will last.
		2-1-10. The enhancement of the consciousness of the consumers related to the safety of the appliances	ANNEX 48 The questionnaire to the consumers associations	Review of the materials and answers	The Philippine and the Japanese sides have confirmed that consumer awareness to product safety of electrical and electronic appliances has increased and continuous efforts will be paid for wider range of consumers to be aware of product safety.

Evaluation Question	Evaluation Items	Information, Data	Source of Information	Means of Verification	Remarks
2. Effectiveness		2-1-11. The positive and negative effects to the project brought by other aid agencies	Project Manager, Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that the BPS in relation to the project has only received assistance from JICA.
3. Efficiency	3-1. Project operation unit will be enhanced	3-1-1. Dispatch of Japanese experts	ANNEX 34 ANNEX 37-1	Review of the materials	The Philippine and the Japanese sides have confirmed the data.
		3-1-2. The allocation of the C/P (Philippine side)	ANNEX 31	Review of the materials	The Philippine and the Japanese sides have confirmed that the allocation of the C/P has been appropriate.
		3-1-3. BPSTC buildings and facilities (Philippine side)	Project Manager, Long-term experts Site observation	Interview Observation	The Philippine and the Japanese sides have confirmed that the BPSTC premises are spacious enough for technology transfer though they might not be spacious enough for future growth of demand for testing.
		3-1-4. Local Cost on the Philippine side	ANNEX 33 Project Director, Project Manager Long-term experts	Review of the materials Interview	The Philippine and the Japanese sides have confirmed that the Philippine side takes full responsibility for the local cost agreed upon in the R/D.
		3-1-5. The assistance to the local cost of Philippine side (Japanese side)	ANNEX 30 Long-term experts	Review of the materials Interview	The Philippine and the Japanese sides have confirmed that there has been no assistance for the local cost of the Philippine side agreed upon in the R/D.
		3-1-6. The total amount of the local cost (Japanese side)	ANNEX 37-1 Long-term experts	Review of materials Interview	The Philippine and the Japanese sides have confirmed the data.
		3-1-7. The total amount expended by October 2002	ANNEX 37-1	Review of materials	The Philippine and the Japanese sides have confirmed the data.

Evaluation Question	Evaluation Items	Information, Data	Source of Information	Means of Verification	Remarks
3. Efficiency	3-2. The machinery and equipment related to electrical and electronic appliances testing will be provided, installed, operated and maintained properly	3-2-1. The appropriateness of types and numbers of provided equipment including the specification of the equipment	ANNEX 18 Project Manager, Long-term experts, C/P	Review of materials Interview	The Philippine and the Japanese sides have confirmed that the types and numbers of provided equipment including the specification of the equipment have been appropriate.
		3-2-2. The timeliness of the input of the equipment	Project Manager, Long-term experts, C/P	Interview	The Philippine and the Japanese sides have confirmed that the machinery and equipment have been provided in a timely manner.
		3-2-3. Installation condition	C/P Site observation	Interview Observation	The Philippine and the Japanese sides have confirmed that the installation condition of the machinery and equipment is good.
		3-2-4. The utilization of the equipment	ANNEX 24	Review of materials	The Philippine and the Japanese sides have confirmed the data.
		3-2-5. Maintenance of the equipment	ANNEX 36-1, 21-1, 21-2, 49, 50 Project Manager, Long-term experts	Review of the materials Interview	The Philippine and the Japanese sides have confirmed that the majority of equipment has been properly maintained. Some calibration equipment have been overdue for maintenance. The BPS will put up a CAF (Certification for Availability of Funds) on the cost of equipment calibration from PFY 2003. The BPS has BPSTC Equipment Management Database which takes an inventory of all the machinery and equipment and keeps track of all the maintenance records.
		3-2-6. The total amount of equipment provided (Japanese side)	ANNEX 37-1 Long-term experts	Review of the materials Interview	The Philippine and the Japanese sides have confirmed the data.

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3. Efficiency	3-3. Testing of main electrical and electronic appliances will be able to be implemented by C/P	3-3-1. The timeliness of the dispatch of the long-term and short-term experts	C/P, Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that the long-term and short-term experts have been dispatched in a timely manner.
		3-3-2. The appropriateness of the expertise of the dispatched experts	Project Manager, C/P, Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that the dispatched experts have had appropriate expertise for their technology transfer.
		3-3-3. C/P training in Japan	ANNEX 35 Project Manager, C/P, Long-term experts	Review of materials Interview	The Philippine and the Japanese sides have confirmed that the CP have learned technical expertise as well as the way their Japanese counterparts work and their experience have influenced their attitude toward their work to a great extent after coming back to the Philippines. The C/P also highly appreciate that they had an opportunity to get to know the most advanced equipment related to their work. Some C/P claimed that their stay in Japan for one month (2wks at JQA and 2wks at JET) was not long enough to receive sufficient technology transfer and thus wish to stay longer.
	3-4. Seminars and training courses related to electrical and electronic appliances testing will be implemented systematically	3-4-1. The system of the seminars and training courses (The seminars and the training courses have been conducted and evaluated.)	ANNEX 28-1, 28-2, 28-3, 29-1, 29-2, 29-3 Project Manager, C/P, Long-term experts	Review of materials Interview	The Philippine and the Japanese sides have confirmed the data.
		3-4-2. The total expenses covered by the Japanese side on seminar related activities	ANNEX 37-1	Review of the materials	The Philippine and the Japanese sides have confirmed the data.

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4. Impact	4-1. The contribution to the safety design procedure of electrical and electronic products from the testing results	4-1-1. The questionnaire to the Associations	Answers to the questionnaire to the electrical and electronic associations	Review of the answers	The Philippine and the Japanese sides have confirmed that the electrical and electronic associations strongly support the activities of the BPSTC and expect it to have a bigger capacity for electrical and electronic appliances testing.
		4-1-2. The questionnaire to the BPSTC clients	Answers to the questionnaire to the clients of BPSTC	Review of the answers	The Philippine and the Japanese sides have confirmed that the clients of the BPSTC highly appreciate the services the BPSTC gives. Some clients had an opinion that they want detailed explanations to failed parts and feel the need to be informed of the most updated list of products under mandatory products certification. Some pointed out that test reports from The BPSTC include untested parts due to the lack of testing equipment at times. The BPSTC, in response to this, plans to require client companies to attach supporting technical documents and test data report for the parts, the BPSTC is unable to test on its own.
	4-2. Improvement of indirect C/P in understanding testing reports from the BPSTC	4-2-1. The self-evaluation of the indirect C/P	Indirect C/P	Interview	The Philippine and the Japanese sides have confirmed that the indirect C/P highly appreciate a weekly session they have with the direct C/P and many of them feel that they learn a lot from the direct C/P. Some commented that after having had this session with the direct C/P, it became much easier for them to understand testing reports forwarded from the BPSTC.

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4. Impact	4-3. The change of awareness, and the behavior of C/P towards their work	4-3-1. The comments of the long-term experts	Project Manager, Long-term experts	Interview	The Philippine and the Japanese sides have confirmed that the long-term experts feel that the attitude and awareness of the C/P toward their work has become keen and positive as the C/P have learned from the Japanese long-term and short-term experts and the C/P have become highly motivated and oriented in the work they are responsible for.
		4-3-2. The self-evaluation of the direct and the indirect C/P	C/P	Interview	The Philippine and the Japanese sides have confirmed that the C/P feel they have benefited in terms of discipline as well as technical aspects from the Japanese long-term and short-term experts.
	4-4. The further promotion of safety standards by the Philippine government	4-4-1. The policy of the Philippine government on safety standards	BPS Director (Project Director), Assistant director ANNEX 40	Interview Review of the material	The Philippine and the Japanese sides have confirmed that the Philippine government has a policy to further promote their safety standards.
	4-5. Higher awareness of consumers on the safety of electrical and electronic appliances	4-5-1. The awareness of consumers to safer products	The questionnaire to the consumers association	Review of the answers	The consumer association has an opinion that the activities of the BPSTC have contributed to the safety of consumers, and more types of appliances should be listed in the list of products under mandatory certification.

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5. Sustainability	5-1. Organizational aspect	5-1-1. The consistency with the policy of Philippine government	BPS Director (Project Director), Assistant director	Interview	The Philippine and the Japanese sides have confirmed that the policy of the Philippine government is consistent.
		5-1-2. The allocation of the C/P after the project	BPS Director (Project Director), Assistant director	Interview	The Philippine and the Japanese sides have confirmed that the BPS allocates the C/P taking their expertise into consideration after the project.
		5-1-3. The relation between the BPSTC and private laboratories	ANNEX 9 ANNEX 10	Review of the material	The Philippine and the Japanese sides have confirmed that the demand for electrical and electronic appliances testing has been increasing and the Philippine side will undertake accreditation of private testing laboratories to conduct the above testing for collecting data while retaining its prerogative of issuing certificates to fill the lack of testing capacity at the BPSTC.
	5-2. Financial aspect	5-2-1. The budget allocation by the Philippine government	BPS Director (Project Director), Assistant director ANNEX 42	Interview Review of the materials	The letter requesting to allocate the 25% of the BPSTC's income from testing fees to cover its maintenance of equipment and operational cost has been submitted to the DBM (Department of Budget and Management) May 2002 and the BPS is waiting for the answer.
	5-3. Technical aspect	5-3-1. The progress of technology transfer	The evaluation of the long-term experts ANNEX 23-1, 23-2, 23-3	Interview Review of the materials	The Philippine and the Japanese sides have confirmed that technology transfer has been very successful judging from the test results of the C/P and the technical level of the C/P is high enough to operate the BPSTC on their own.

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5. Sustainability		5-3-2. The progress of technology transfer from the direct C/P to the indirect C/P	Project Manager, Long-term experts, C/P	Interview	The Philippine and the Japanese sides have confirmed that the direct and indirect C/P have a weekly meeting for the direct C/P to transfer technology they have obtained from the Japanese long-term and short-term experts. This has been working very good and they plan to continue to practice this even after the termination of the project.
		5-3-3. Maintenance of equipment	Project Manager, Long-term experts, C/P	Interview	The Philippine and the Japanese sides have confirmed that the majority of equipment has been properly maintained. Some calibration equipment have been overdue for maintenance. The BPS will put up a CAF (Certification for Availability of Funds) on the cost of equipment calibration from PFY 2003.
	5-4. Responsibilities of BPS	5-4-1. The degree of involvement of the project director and the project manager	Project Director Project Manager	Interview	The Philippine and the Japanese sides have confirmed that both the project director and the project manager have committed themselves to the project in their best capacity.
	5-5. Others	5-5-1. Other factors interrupting the sustainability of the BPSTC			The Philippine and the Japanese sides have confirmed that there is no other factor interrupting the sustainability of the BPSTC.

4. 質問票及び集計結果表

質問票配布先リスト

配布先		数
NEDA	Project Monitoring Staff	1人
DTI	Bureau of Trade regulation and Consumer Protection	1人
BPS	間接 C/P 含む	8人
BPSTC	直接 C/P 含む	13人
トレーニングコース参加者	家電メーカーのエンジニア	47人
中堅技術者養成プログラム参加者	DTI Region Standard Officer	28人
BPSTC のクライアント	家電メーカー（トレーニングコース参加者と重複する企業もあり）	47社
業界団体	Association of Home Appliance Manufacturers Inc.他3団体	4団体
消費者団体	Consumer Electronic Products Manufacturers 他1団体	2団体
大学	University of the Philippines 他2校	3校
		合計 154

**Japan International Cooperation Agency (JICA) /
Bureau of Product Standards Testing Center (BPSTC),
Electrical and Electronic Appliances Testing Project
Final Evaluation Questionnaire for NEDA**

Dear Madam or Sir,

This is a questionnaire for the final evaluation of the JICA/BPSTC technical cooperation project. The project is being implemented for the duration of four years from April 1999 with the purpose of providing appropriate technical service in the field of electrical and electronic appliances testing.

The answers will be collected and analyzed by an external consultant hired by JICA for the purpose of evaluating the relevance and effectiveness of the JICA/BPSTC project. Although the analyzed data of the questionnaires might be presented in public, the answer of each respondent will be kept confidential.

Please forward this questionnaire to a person who has attended BPSTC training courses ,and have him/her fill out the blank boxes of the questionnaire. The question could be skipped if it requires information that is difficult to disclose for secrecy reason.

It would be highly appreciated if the filled-in questionnaire could be returned to (person in charge) by (date).

We sincerely appreciate your cooperation.

JICA Evaluation Team

Date: _____

Name of respondent	
Title/Position of respondent	

1 smooth operation of the project?

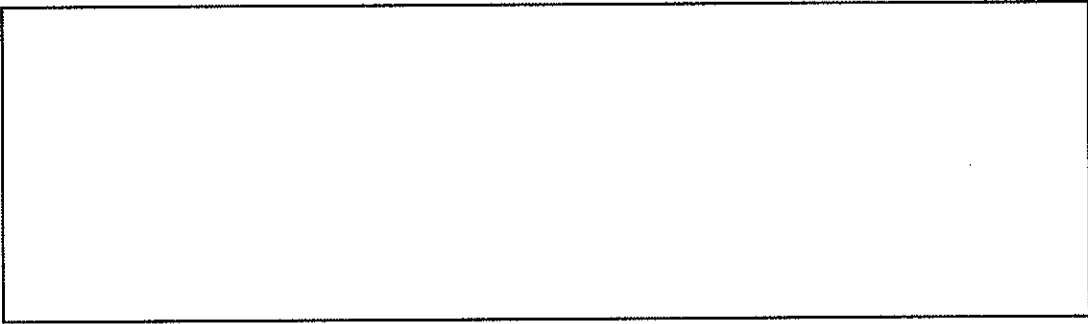
2 Do you think the project plan was reasonable in terms of the cost which your government is charged?

3 Did you monitor that any personnel change or organization change have affected the activities of the project? If you have any, please describe it.

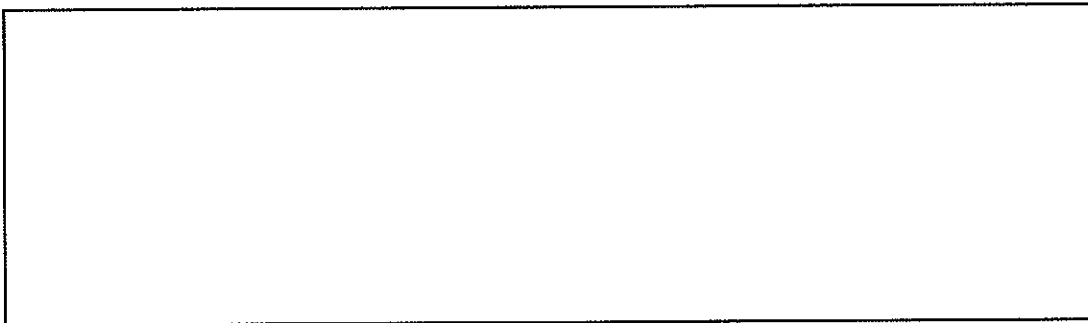
4 Do you think the selection of C/Ps is appropriate in terms of technical ability, sense of responsibility, and personality? If you monitor any problem on this, please describe it.

5 According to your observation, do the C/Ps stay long in the testing center? If they do not stay long, what would be the possible causes?

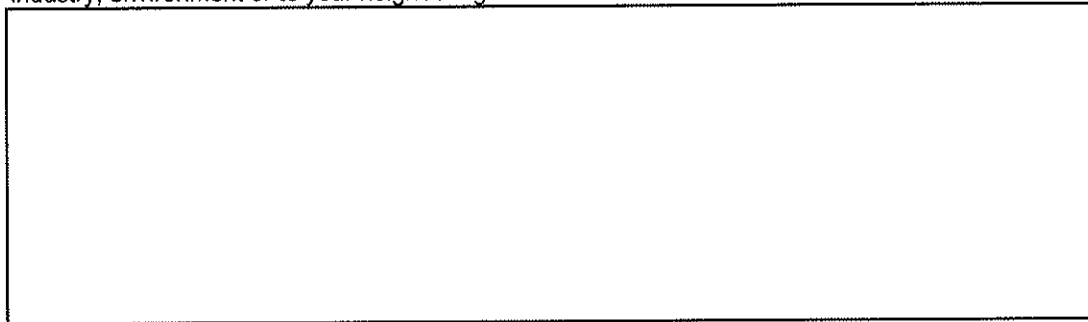
6 How do you evaluate the achievement of the project?



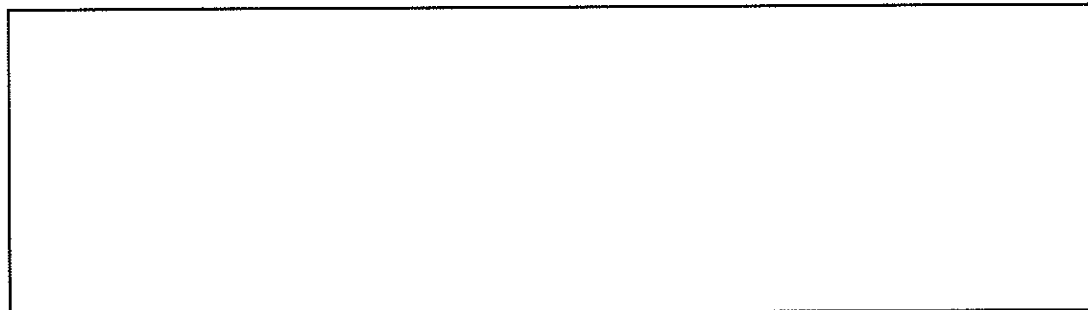
7 Do you think it is necessary to correct some activities of the BPSTC to achieve its purpose better?



8 What positive or negative impacts do you think occurred in the field of technology, industry, environment or to your neighboring countries?



9 Do you have any recommendation on the project?



Thank you very much for your time and cooperation.

**Japan International Cooperation Agency (JICA) /
Bureau of Product Standards Testing Center (BPSTC),
Electrical and Electronic Appliances Testing Project
Final Evaluation Questionnaire for Department of Trade and Industry (DTI)**

Dear Madam or Sir,

This is a questionnaire for the final evaluation of the JICA/BPSTC technical cooperation project. The project is being implemented for the duration of four years from April 1999 with the purpose of providing appropriate technical service in the field of electrical and electronic appliances testing.

The answers will be collected and analyzed by an external consultant hired by JICA for the purpose of evaluating the relevance and effectiveness of the JICA/BPSTC project. Although the analyzed data of the questionnaires might be presented in public, the answer of each respondent will be kept confidential.

Please forward this questionnaire to a person who has attended BPSTC training courses, and have him/her fill out the blank boxes of the questionnaire. The question could be skipped if it requires information that is difficult to disclose for secrecy reason.

It would be highly appreciated if the filled-in questionnaire could be returned to (person in charge) by (date).

We sincerely appreciate your cooperation.

JICA Evaluation Team

Date: _____

Name of respondent	
Title/Position of respondent	

- 1 Could you describe basic policy on industrial standard and certification system, such as "PS" mark system?

- 2 What has made you to strengthen the industrial standard and certification system?

- 3 What is "Philippines 2000"?

4 Do you think the project has implemented timely?

Timely Not timely

If not timely, what is the problem? _____

How should it have been solved? _____

5 What is the position and the role of BPSTC in your industrial policy?

6 Will it likely to be organized other test centers in Philippine?

7 How do you evaluate the achievement of the project?

8 Do you think it is necessary to correct some activities of the BSPTC to achieve its purpose better?

9 What positive or negative impacts do you think occurred in the field of technology, industry, environment or to your neighboring countries?

10 Do you have any data to show that the valid technical consumer complaints on electrical and electronic appliances have been decreasing? If you have any data to support it,

- 11 Do you have any information on the reaction on "PS" mark from consumes. If you have any information, please describe it.

- 12 Do you have any other request on the project?

**Japan International Cooperation Agency (JICA) /
Bureau of Product Standards Testing Center (BPSTC),
Electrical and Electronic Appliances Testing Project**

Dear Madam or Sir,

This is a questionnaire for the final evaluation of the JICA/BPSTC technical cooperation project. The project is being implemented for the duration of four years from April 1999 with the purpose of providing appropriate technical service in the field of electrical and electronic appliances testing.

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Please forward this questionnaire to a person who has attended BPSTC training courses, and have him/her fill out the blank boxes of the questionnaire. The question could be skipped if it requires information that is difficult to disclose for secrecy reason.

It would be highly appreciated if the filled-in questionnaire could be returned to (person in charge) by (date).

We sincerely appreciate your cooperation.

JICA Evaluation Team

Date: _____

Name of respondent	
Title/Position of respondent	

1 What is the position and the role of BPSTC in your industrial policy?

2 Do you think the support from Philippine government was adequate enough in terms of budget allocation?

3 government is charged?

4 Do you think the government will permit you to use 25% of your income? If you think it yes, when it will be permitted.?

5 Do you have any plan to expand the activities or functions of BPSTC in the near future? If you have any future plan, please describe it.

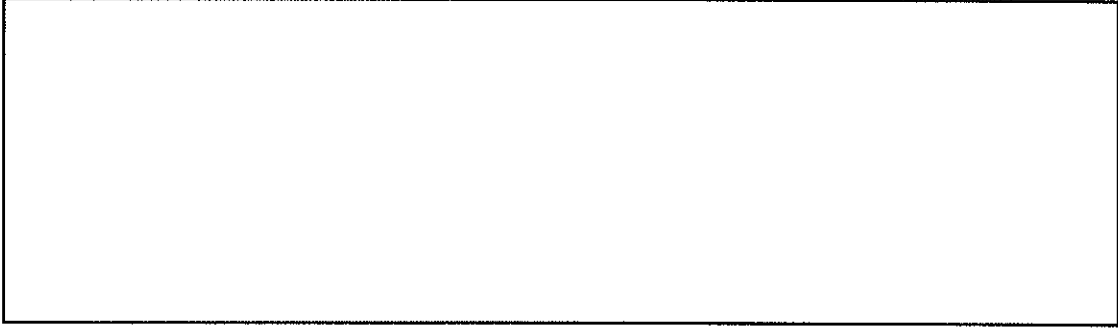
6 Did you have any personnel change or organization change which affect the activities of the project? If you have any, please describe it.

7 Do you think the selection of C/Ps is appropriate in terms of technical ability, sense of responsibility, and personality? If you have any problem on this, please describe it.

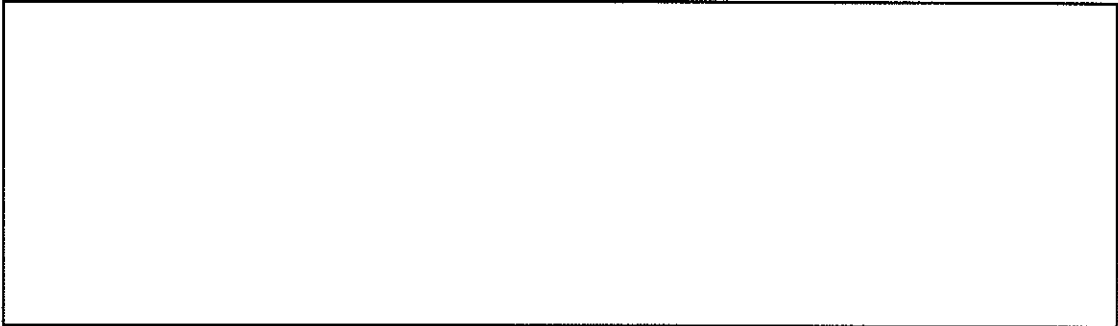
8 Do the C/Ps stay long in the testing center? If they do not stay long, what would be the possible causes?

9 How do you evaluate the achievement of the project?

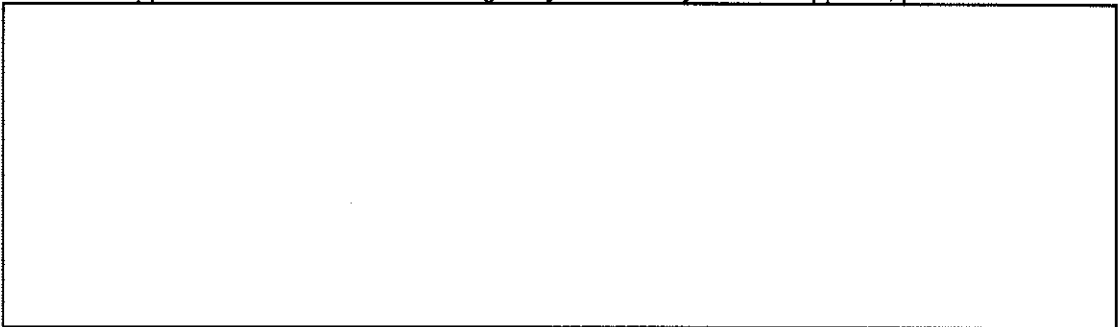
10 Do you think it is necessary to correct some activities of the BPSTC to achieve its purpose better?



11 What positive or negative impacts do you think occurred in the field of technology, industry, environment or to your neighboring countries?



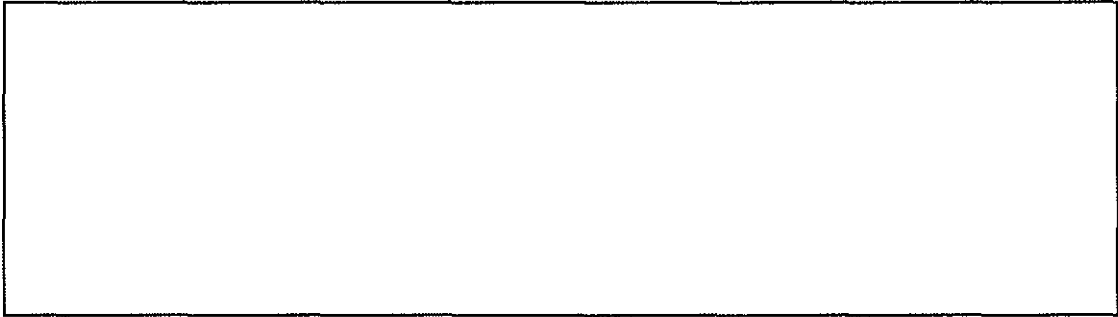
12 Do you have any data to show that the valid technical consumer complaints on electrical and electronic appliances have been decreasing? If you have any data to support it, please submit us.



13 Do you have any information on the reaction on "PS" mark from consumes. If you have any information, please describe it.



14 Do you have any other request on the project?



Thank you very much for your time and cooperation.

**BPSTC/JICA Electrical and Electronic Appliances Testing Project
Final Evaluation Questionnaire for Counterpart Personnel**

This is a questionnaire for the final evaluation of the above project. The answers will be collected and analyzed by the JICA evaluation team, whose members will then have interviews with selected counterpart personnels for more detailed information.

Please fill out the questionnaire and return it to (the person in charge) no later than (date).

We sincerely appreciate your cooperation.

JICA Evaluation Team

Basic information

Name of respondent: _____

Classification: Direct Counterpart Indirect Counterpart

Position: _____

In which technology-transfer area did you participate?

Motor operated appliances Electronic appliances

Did you participate in training in Japan? Yes No

Training subject: _____

Are you a trainer of BPSTC-related training courses Yes No

BPSTC training (Subject) _____ (Period) _____
(Both long-term and
short-term) _____

Training sponsored
by other (Subject) _____ (Period) _____
organizations _____

Questions about project implementation (Output 0)

Reference for eval team

- 1) How much of your working hours at BPSTC does the project activities share?
Approximately _____ %
- 2) Were the number, specialization, capability, length of stay and timing of dispatch of Japanese experts appropriate for the technology transfer? OP 0
 Yes, very much Just fair Not so Don't know
What was most appropriate(good) about the dispatch of Japanese experts?

What was most inappropriate (bad) about the dispatch of Japanese experts?

What difficulties did you face because of the inappropriateness described above?

Could the outputs have been achieved by smaller number of experts?
 Yes No How many was enough? _____
- 3) Does DTI provide enough budget for annual operation and maintenance of BPSTC? OP 0
 Enough Not enough
If not enough, what is the problem? _____
How could it be solved? _____
- 4) Do you think that BPSTC has proper and reasonable organization management system? OP 0
 Yes, very much Just fair Not so Don't know
What was most appropriate(good) about the management system?

What was most inappropriate (bad) about the management system?

What difficulties did you face because of the inappropriateness described above?

Questions about project facilities and equipment (Output 1)

5) Are the BPSTC building and facilities adequate for project implementation? OP 1-1

Too much Adequate Not adequate enough

Is the layout of equipment user-friendly?

Yes, very much Just fair Not so

If not user-friendly, what is wrong? _____

What problems are you facing because of the inadequate layout of equipment?

How could the problem be solved? _____

6) Were the type, amount and the timing of installation of the equipment provided by Japan appropriate for the achievement of the project outputs? OP 1-1

Yes, very much Just fair Not so Don't know

What was most appropriate (good) about the provision of equipment?

What was most inappropriate (bad) about the provision of equipment?

What difficulties do you face because of the inappropriateness described above?

Could the outputs have been achieved by cheaper or smaller amount of equipment?

Yes No Comments: _____

7) Were the contents, amount and the timing of the development of the manuals for equipment by Japan appropriate for the achievement of the project outputs? OP 1-2

Yes, very much Just fair Not so Don't know

What was most appropriate (good) about the provision of equipment?

What was most inappropriate (bad) about the provision of equipment?

What difficulties do you face because of the inappropriateness described above?

- 8) Are the after-sales services by local vendors adequate, if any? OP 1-3
 Yes, very much Just fair Not so
 If not adequate, what is the problem? _____
 How could it be solved? _____

Questions about technology transfer from Japanese experts (Output 2)

- 9) How many types of appliances can you handle for testing at before the project and at the moment? OP 2-1
 Before the project: _____ items
 At the moment: _____ items

- 10) How efficient have you been in the test of appliance at the moment? OP 2-2
 Before the project: _____ days/item
 At the moment: _____ days/item
 (Note: Please fill the average figure, because testing duration is different item by item.)

- 11) Were the contents, amount and the timing of the development of the textbooks and manuals for technology transfer by Japan appropriate for the achievement of the project outputs? OP 2-3
 Yes, very much Just fair Not so Don't know
 What was most appropriate (good) about the provision of equipment?

 What was most inappropriate (bad) about the provision of equipment?

 What difficulties do you face because of the inappropriateness described above?

12) Was the approach (method) of the technology transfer appropriate?
Yes, very much Just fair Not so Don't know
What was most appropriate (good) about the approach of technology transfer?

What was most inappropriate (bad) about the approach of technology transfer?

How could the approach of technology transfer have been improved more?

13) Was the counterpart training in Japan appropriate in terms of the number of trainees, subjects, curriculum, length of stay and timing?

Yes, very much Just fair Not so Don't know

What was most appropriate (good) about the training in Japan?

What was most inappropriate (bad) about the training in Japan?

What difficulties did you face because of the inappropriateness described above?

14) Have your awareness and style of work changed through the technology transfer?

Yes No Changes: _____

- 15) How frequently do you speak with Japanese experts?
Everyday Every week Less frequent than weekly
- Are there any opportunity to present your opinions about the project?
Yes No Specify: _____
- Are you facing any difficulties in communication with Japanese experts?
Yes No Specify: _____
- How could the above-described communication problem have been solved?

Questions about training services (Output 3)

- 16) Were the contents, amount and the timing of the development of the textbooks and teaching materials for seminars and training courses organized by Japan, appropriate for the achievement of the project outputs? OP 3-1

Yes, very much Just fair Not so Don't know

What was most appropriate (good) about the provision of equipment?

What was most inappropriate (bad) about the provision of equipment?

What difficulties do you face because of the inappropriateness described above?

- 17) How many times seminars and training courses are held inside and outside of the project site? OP 3-2

Inside of the project: _____

Outside of the project: _____

Questions about project impact

18) The project purpose of BPSTC is "BPS will be able to provide appropriate technical service in the field of electrical and electronic appliances testing." Besides the project activities, are there any other factors that improved the BPSTC testing capability?

Yes No Specify: _____

19) Are there any factors that inhibited the achievement of the above-stated project purpose?

Yes No Specify: _____

How could such inhibiting factors have been eliminated?

20) The overall goal of the project is "The safety of the electrical and electronic appliances in the market of the Republic of the Philippines will be improved" and it has already been achieved to some extent through this project. Besides this overall goal, are there any other effects brought by the implementation of the project?

Yes No Specify: _____

Other questions

21) Please describe briefly your work plan for next few years.

22) Any other comments on BPSTC:

Thank you very much for your time and cooperation.

**Japan International Cooperation Agency (JICA) /
Bureau of Product Standards Testing Center (BPSTC),
Electrical and Electronic Appliances Testing Project
Final Evaluation Questionnaire for BPSTC Trainees**

Dear Madam or Sir,

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Please forward this questionnaire to a person who has attended BPSTC training courses, and have him/her fill out the blank boxes of the questionnaire. The question could be skipped if it requires information that is difficult to disclose for business reason.

It would be highly appreciated if the filled-in questionnaire could be returned to (person in charge) by (date).

We sincerely appreciate your cooperation.

JICA Evaluation Team

Date: _____

Name of firm/organization	
Type/content of business	
Name of respondent	
Title/Position of respondent	

- 1 Please describe the purpose of your participation to the training course.

2 Are you satisfied with the BPSTC training course?

Very much satisfied Much satisfied Fairly satisfied Not much satisfied Not satisfied

Reasons/ Special comments:

3 Was the information given from the BPSTC training useful for the review of the design philosophy of your firm/organization?

Very much useful Much useful Fairly useful Not much useful Not useful

Comments (the way BPSTC-given information was utilized/ reasons for non-usefulness)

4 Any other comments on BPSTC technical services:

Thank you very much for your time and cooperation.

**BPSTC/JICA Electrical and Electronic Appliances Testing Project
Final Evaluation Questionnaire for Counterpart Personnel**

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Please fill out the questionnaire and return it to (person in charge) no later than (date).

We sincerely appreciate your cooperation.

JICA Evaluation Team

Name of respondent: _____

Position: _____

In which technology program did you participate?

Motor operated appliances Electronic appliances

1) How much of your working hours are related to product testing?

Approximately _____ %

2) Were the number, specialization, capability, of trainers appropriate for the program?

Yes, very much Just fair Not so Don't know

What was most appropriate(good) about the trainers?

What was most inappropriate (bad) about the trainers?

3) Were the contents, and description of the textbooks for the program good enough?

Yes, very much Just fair Not so Don't know

What was most appropriate (good) about the provision of equipment?

What was most inappropriate (bad) about the provision of equipment?

What difficulties do you face because of the inappropriateness described above?

4) Was the training method appropriate?

Yes, very much Just fair Not so Don't know

What was most appropriate (good) about the training method?

What was most inappropriate (bad) about the training method?

How could the training method have been improved more?

5) Have your awareness and style of work changed through the technology transfer?

Yes No Changes: _____

6) Any other comments on BPSTC:

Thank you very much for your time and cooperation.

**Japan International Cooperation Agency (JICA) /
Bureau of Product Standards Testing Center (BPSTC),
Electrical and Electronic Appliances Testing Project
Final Evaluation Questionnaire for BPSTC Clients**

Dear Madam or Sir,

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Please forward this questionnaire to a person who has attended BPSTC training courses ,and have him/her fill out the blank boxes of the questionnaire. The question could be skipped if it requires information that is difficult to disclose for business reason.

It would be highly appreciated if the filled-in questionnaire could be returned to (person in charge) by (date).

We sincerely appreciate your cooperation.

JICA Evaluation Team

Date: _____

Name of firm/organization	
Type/content of business	
Name of respondent	
Title/Position of respondent	

1 Are you satisfied with the test duration of BPSTC?

() Very much satisfied () Much satisfied () Fairly satisfied () Not much satisfied () Not satisfied

Reasons/ Special comments:

2 How do you evaluate the test report from BPSTC?

Very much useful Much useful Fairly useful Not much useful Not useful

Comments

3 How do you evaluate the test fee of BPSTC?

Expensive Reasonable Cheap

Comments (what is the reasonable price for you?)

4 Any other comments on BPSTC testing services:

Thank you very much for your time and cooperation.

**Japan International Cooperation Agency (JICA) /
Bureau of Product Standards Testing Center (BPSTC),
Electrical and Electronic Appliances Testing Project**

Dear Madam or Sir,

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We sincerely appreciate your cooperation.

JICA Evaluation Team

Date: _____

Name of firm/organization	
Type/content of business	
Name of respondent	
Title/Position of respondent	

1 Do you see the trend of the spread of "PS" mark to the wider range of electric and electronic appliances? If you think it "yes", what is the reason of it.

2 If you think "PS" mark is necessary for wider range of appliances, what do you expect to BPS Testing Center?

3 When "PS" mark shows rapid spread, what would be the problems?

4 How do you evaluate the service of BPS Testing Center in terms of test speed and reporting content

5 Do you have any other request on the project?

Thank you very much for your time and cooperation.

**Japan International Cooperation Agency (JICA) /
Bureau of Product Standards Testing Center (BPSTC),
Electrical and Electronic Appliances Testing Project
Final Evaluation Questionnaire for Consumer Group**

Dear Madam or Sir,

This is a questionnaire for the final evaluation of the JICA/BPSTC technical cooperation project. The project is being implemented for the duration of four years from April 1999 with the purpose of providing appropriate technical service in the field of electrical and electronic appliances testing.

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Please forward this questionnaire to a person who has attended BPSTC training courses, and have him/her fill out the blank boxes of the questionnaire. The question could be skipped if it requires information that is difficult to disclose for secrecy reason.

It would be highly appreciated if the filled-in questionnaire could be returned to (person in charge) by (date).

We sincerely appreciate your cooperation.

JICA Evaluation Team

Date: _____

Name of firm/organization	
Type/content of business	
Name of respondent	
Title/Position of respondent	

- 1 Do consumers feel security when "PS" mark is labeled on electric and electronic appliances? If not, what is the reason of it?

2 Do your organization strongly promote the spread of "PS" mark? If you have any movement on it, could you describe it.

3 Do consumers tend to choose electric and electronic appliances with "PS" mark even if it is a bit more expensive? If not, what is the reason of it?

4 What electric and electronic appliances do you think it necessary to have "PS" mark?

5 What request does your group have on the safety of electric and electronic appliances to your government?

6 standards testing center?

Yes No

If it is "Yes", what do you think of the cooperation?

Thank you very much for your time and cooperation.

フィリピン電気・電子製品試験技術協力事業
終了時評価質問票（長期専門家）

各位

標記プロジェクトの終了時評価にかかる情報収集の一環として、本質問票への回答をお願いいたします。回答は、他の方法により収集した情報とともに、プロジェクトの実績、実施プロセスおよび5項目評価の判断材料とさせていただきますと考えております。つきましては、ご回答を「評価分析」担当コンサルタント豊田 一郎 (ichiro@pl.toyo-eng.co.jp) に10月4日午前中(日本時間)までに送付いただけますと幸いです。お忙しいところ大変急なお願いで恐縮ですが、ご協力いただけますようお願い申し上げます。

終了時評価調査団

基本情報

専門家氏名 _____ ご自身の専門分野 _____

プロジェクトの実施体制にかかる質問(成果0)

- 1) 専門家の派遣人数、専門分野、派遣期間、派遣のタイミングは技術移転のために適切でしたか？

非常に適切 ほぼ適切 不適切 わからない

何が最も適切でしたか？ _____

不適切だった場合、それは何で、プロジェクトにどのような弊害がありましたか？

もっと少ない人数で同じ成果を達成できたと思われませんか？

はい いいえ わからない

- 2) カウンターパートおよびフィリピン側事務スタッフの人数、配属状況、能力は、プロジェクト実施に適切でしたか？

非常に適切 ほぼ適切 不適切 わからない

不適切だった場合、それは何で、どのような弊害がありましたか？ _____

- 3) 研修員の受入人数、分野、研修内容、研修期間、受入のタイミングは、プロジェクトの成果達成のために適切でしたか？

非常に適切 ほぼ適切 不適切 わからない

何が最も適切でしたか？ _____

不適切だった場合、それは何で、プロジェクトにどのような弊害がありましたか？

- 4) BPSTCの建物及び施設はプロジェクトの実施に十分なものですか？

十分以上 十分 不十分 わからない

コメント： _____

機材配置は適切かつ使いやすくなっていますか？ はい いいえ わからない

問題がある場合、それは何で、どのような悪影響がありましたか？

その問題をどのように改善できると思いますか？

- 5) フィリピン側のプロジェクトコストの拠出は、プロジェクト実施のために適切でしたか？

非常に適切 ほぼ適切 不適切 わからない

不適切だった場合、どのような弊害がありましたか？

- 6) 現地業務費によるプロジェクトコスト支援の額、内容、実施のタイミングはプロジェクト実施のために適切でしたか？

非常に適切 ほぼ適切 不適切 わからない

どの点で最も役立ちましたか？ 不適切だった場合、何が問題でしたか？

- 7) プロジェクトの実施にあたり国内委員会から助言を受けましたか？

はい いいえ わからない

活動実施にその助言をどのように反映させましたか？

どのような助言が役立ちましたか？

国内委員会に関連する事項で困った点があったら教えてください。

今後、国内委員会の技術協力プロジェクトへのかかわりをどのように改善していけると
思われますか？

8) 合同調整委員会はプロジェクトの円滑な実施に実質的に役立ったと思われますか？

非常に役立った 役立った 役立たなかった わからない

どのような点が役立ちましたか？

今後、合同調整委員会などの外部委員会の技術協力プロジェクトへのかかわりをどのよう
に改善していけると思われますか？

9) 日本からの派遣調査団による提言は、プロジェクトの円滑な実施に実質的に役立ったと思
われますか？

非常に役立った 役立った 役立たなかった わからない

どのような点が役立ちましたか？役立たなかった場合、理由は何ですか？

10) BPSTC以外の機関と連携して活動を行いましたか？ はい いいえ

連携があった場合、どのような活動を行いましたか？

他機関からの協力を得られたことで、プロジェクトの成果がより効率的に達成されたと思
われますか？

はい いいえ わからない

理由： _____

11) BPSTCの運営管理システムは機能していると思われますか？

十分機能している ほぼ機能している 機能していない わからない

今後BPSTCが自立発展していくためにはどのような運営管理上の問題がありますか？

上記のような運営管理上の問題をどのように改善できると思われますか？

- 12) BPSTCは今後の活動計画を策定していますか？ はい いいえ 不明
策定している場合、その事業計画は実効的なものであると思われますか？
非常に実効的 ほぼ実効的 実効的でない わからない

理由： _____

策定していない場合、今後策定の動きはありますか？ はい いいえ 不明

- 13) 本プロジェクトの協力期間を4年間としたことは妥当だったと思われますか？
はい いいえ わからない

理由： _____

調達機材にかかる質問

- 14) 日本側、フィリピン側がプロジェクトに投入した機材の種類、数、設置のタイミングは、プロジェクトの成果達成のために適切でしたか？

非常に適切 ほぼ適切 不適切 わからない

何が最も適切でしたか？ _____

不適切だった場合、それは何で、プロジェクトにどのような弊害がありましたか？

もっと少ない、または安い機材で同じ成果を達成できたと思いますか？

はい いいえ わからない

- 15) 機材のマニュアル類は整備／活用されていますか？（複数選択）

十分整備されている ほぼ整備されている 整備されていない

十分活用されている ほぼ活用されている 活用されていない

わからない

整備／活用されていない場合、何が問題ですか？

その問題をどのように改善できると思われますか？ _____

- 16) カウンターパートは機材の維持管理、更新を今後も自力で行っていけると思われますか？

はい いいえ わからない

理由： _____

技術移転の方法と成果にかかる質問

17) 技術移転はPDMやTCPIに沿って行われましたか？

十分沿っていた ほぼ沿っていた 沿っていなかった わからない

沿っていなかった場合、何が問題で、どのように改善できたと思われますか？

技術移転にあたり、どのような点を工夫されましたか？

そのような工夫の中で特に効果をあげたと思われるのはどのような点ですか？

18) カウンターパートにより開発された教材、マニュアル等は数量、質それぞれ満足のものですか？

(数量) 非常に満足 ほぼ満足 不十分 わからない

(質) 非常に満足 ほぼ満足 不十分 わからない

満足である場合、特筆すべき点があれば教えてください。問題がある場合、それは何で、どのような不都合を生じさせていますか？

今後、自力での教材開発のためには何が課題だと思われますか？

19) カウンターパートは自力でセミナーやトレーニングコースを計画、実施していくことが可能だと思われますか？

十分可能 ほぼ可能 不可能 わからない

可能である場合、特筆すべき点があれば教えてください。

自力での実施が不可能である場合、何が問題で、今後どのように改善していけると考えられますか？

20) 技術移転を通して、カウンターパートの業務に対する意識や業務実施方法が変化しましたか？

はい いいえ わからない

変化した場合、どのように変わりましたか？ _____

そのような変化を引き起こした要因としてどのようなことが考えられますか？

21) テクニカル・カウンターパートとはどの程度の頻度で会話をしていますか(しましたか)？

毎日 毎週 1週間以上会話をしていない

テクニカルカウンターパートがプロジェクトについて意見を言う場がありましたか？

はい いいえ 具体例: _____

カウンターパートとのコミュニケーションに問題はありましたか？ はい いいえ

どのようなコミュニケーション問題があり、どのように改善できたと思いますか？

研修事業にかかる質問

22) BPSTCエンジニアの講師としてのレベルはどの程度ですか。

非常に満足 ほぼ満足 不適切

何が最も適切でしたか？ _____

不適切だった場合、それは何で、今後どのように改善していけると思われますか？

23) セミナーの開催は定期的・体系的に実施されていますか？

実施されている 実施されていない

実施されていない場合その原因はなんですか？

その原因は今後どのように改善していけば良いと思われますか？

24) セミナーおよびトレーニングコースにて使用された教材等は量、質それぞれ研修効果を出すのに適切でしたか？

(量) 非常に適切 ほぼ適切 不適切 わからない

(質) 非常に適切 ほぼ適切 不適切 わからない

不十分だった場合、何が問題でしたか？問題をどのように改善できると思われますか？

プロジェクトのインパクトにかかる質問

25) プロジェクトの目標は「BPS試験所が電気・電子製品に関して適切な技術サービスを提供できるようになる」ことですが、この目標達成を阻害する要素がありましたらお教え下さい。

どのようにしたらその阻害要因を回避できたと思われますか？

26) プロジェクトの上位目標は「フィリピン国内で流通する電気・電子製品の安全性が向上する」ことですが、これ以外に、プロジェクト実施によって引き起こされたプラス、マイナスの影響がありましたらお教え下さい。

プラス: _____

マイナス: _____

それらの影響はなぜ起こりましたか？

マイナスの影響が起こっていた場合、それを回避する対策は取られましたか？

はい いいえ わからない

対策: _____

協力対象の妥当性にかかる質問

27) 本プロジェクトでBPSTCに対して協力を行ったことは適切だと思われますか？

非常に適切 ほぼ適切 わからない

理由: _____

フィリピンには他に、どのような電気・電子製品テスト関連機関がありますか？

それらの中で、協力対象としてより適切であったと思われる機関があればお教えください。

- 28) 今後フィリピンで、PSマーク適用製品は増加してゆくと思われますか？
非常に増えている 増えている 増えていない わからない
PSマーク適用製品が増えていると感じる根拠を挙げてください。
-

- 29) その他コメント等ありましたら自由にお書き下さい。

ご協力どうもありがとうございました。

質問票回答結果(C/P)

		Direct	Indirect		
1	Direct or Indirect C/P	8 72.7%	3 27.3%		
2	BPSTCの業務ほどの程度しているか	%	%		
	C/P 1	30%	-		
	C/P 2	100%	-		
	C/P 3	40%	-		
	C/P 4	40%	-		
	C/P 5	15%	-		
	C/P 6	40%	-		
	C/P 7	n.a.	-		
	C/P 8	10%	-		
	C/P 9	-	10%		
	C/P 10	-	15%		
	C/P 11	-	5%		
3	専門家の数、専門性、能力、滞在期間、派遣タイミング等は適切	非常に適切 1 9.1%	適切 9 81.8%	不適切 0 0.0%	わからない 1 9.1%
4	より少数の専門家で成果は達成できたか	はい 3 27.3%	いいえ 6 54.5%	わからない 2 18.2%	
5	DTIIはBPSTCに対して十分な予算を確保しているか	十分 2 18.2%	不十分 9 81.8%		
6	BPSTCのマネージメントは合理的になされているか	非常に合理的 0 0.0%	合理的 11 100.0%	不合理 0 0.0%	
7	BPSTCの施設は適当か	大きすぎる 0 0.0%	適当 7 63.6%	不十分 4 36.4%	
8	機器の配置はよいか	非常に良い 1 9.1%	良い 9 81.8%	不適當 1 9.1%	
9	供与機材の仕様、数、投入タイミングは適切か	非常に良い 6 54.5%	適切 4 36.4%	不適切 1 9.1%	わからない 0 0.0%
10	より安く、少ない機材で成果を達成することができたか	はい 1 9.1%	いいえ 8 72.7%	わからない 2 18.2%	
11	マニュアルの内容、数、用意されたタイミングは適切か	非常に適切 4 36.4%	適切 4 36.4%	不適切 0 0.0%	わからない 3 27.3%
12	機材供給メーカーのアフターサービスは適切か	非常に適切 2 18.2%	適切 4 36.4%	不適切 2 18.2%	わからない 3 27.3%

13	何種類の製品をテストできるようになったか	プロジェクト前		現在	
		Items		Items	
	C/P 1	2		15	
	C/P 2	0		9	
	C/P 3	1		11	
	C/P 4	0		2	
	C/P 5	1		4	
	C/P 6	0		20	
	C/P 7	0		3	
	C/P 8	0		2	
	C/P 9	0		2	
	C/P 10	n.a.		n.a.	
	C/P 11	n.a.		n.a.	
14	平均1アイテム当たりどの程度の時間でテストできるか	プロジェクト前		現在	
		working days/item		working days/item	
	C/P 1	20		14	
	C/P 2	n.a.		6	
	C/P 3	15		7	
	C/P 4	n.a.		14	
	C/P 5	30-40		10-14	
	C/P 6	n.a.		7	
	C/P 7	n.a.		3-5	
	C/P 8	21		10	
	C/P 9	21		14	
	C/P 10	n.a.		n.a.	
	C/P 11	n.a.		n.a.	
15	技術移転に使用された、教材の内容、数、用意されたタイミングは適切か	非常に適切	適切	不適切	わからない
		2 18.2%	6 54.5%	0 0.0%	3 27.3%
16	技術移転の手法は適切か	4 36.4%	5 45.5%	0 0.0%	2 18.2%
		17	日本でのトレーニングは受講者数、テーマ、カリキュラム、期間等適切だったか	0 0.0%	9 81.8%
18	技術移転を通して、仕事への姿勢、働き方が変わったか			はい	いいえ
		9 81.8%	1 9.1%	1 9.1%	
19	日本人専門家とはどの程度の頻度でコミュニケーションがあるか	毎日	毎週	それ以下	
		5	3	3	
20	プロジェクトに対する自分の意見を発言できる機会はあるか	はい	いいえ	わからない	
		6 54.5%	5 45.5%	0 0.0%	
21	日本人専門家とのコミュニケーションの問題はあるか	はい	いいえ	わからない	
		2 18.2%	8 72.7%	1 9.1%	
22	セミナー、トレーニングコースで使用された、教材の内容、数、用意されたタイミングは適切か	非常に適切	適切	不適切	わからない
		3 27.3%	5 45.5%	0 0.0%	3 27.3%
23	プロジェクトの活動以外で本プロジェクト目標の達成に貢献した事項があるか	はい	いいえ		
		8 72.7%	3 27.3%		

24	本プロジェクト目標の達成を阻害した事項があるか	4 36.4%	7 63.6%
25	上位目標以外に本プロジェクトがもたらした成果はあるか	10 90.9%	1 9.1%
26	ここ数年間のあなたのキャリアプランは	<p>C/P 1 BPSTCでの仕事を続ける。 C/P 2 テスト可能な製品数を増やす。 C/P 3 この仕事を続け技術力を上げる。 C/P 4 このキャリアを続けてゆく。 C/P 5 (コメントなし) C/P 6 ここで働きながら、次の2年間でエンジニアリングマネジメントを学ぶ。 C/P 7 産業界のレベルを上げる、消費者の安全に対する意識を高める。 C/P 8 テスト能力と判断力を向上させる。 C/P 9 技術力の向上。 C/P 10 機器の校正とテスト技術の向上。 C/P 11 IEC 65の知識を強化する。</p>	
27	次はどのような分野のテスト技術を学びたいか	<p>C/P 1 IEC 950 (information technology equipment) C/P 2 IT製品のテスト技術を学ぶために日本政府から援助してもらう。 C/P 3 今までに学んでいないもの何でも。 C/P 4 IT製品とメディカル製品のテスト技術。 C/P 5 (コメントなし) C/P 6 ETCを学びたい。 C/P 7 335は終わったので、65の知識をつける。 C/P 8 ジョブとして本番のテストをすること。 C/P 9 C/Pの実施するトレーニングコースに参加し技術力をつける。 C/P 10 (コメントなし) C/P 11 現状プランなし。</p>	

質問票回答結果(BPSTC研修受講者)

	非常に適切	適切	まあ適切	あまり適切でない	不適切
1 研修のテーマは適切か	11 37.9%	17 58.6%	1 3.4%	0 0.0%	0 0.0%
2 講義と実習の時間配分は適切か	5 17.2%	10 34.5%	9 31.0%	5 17.2%	0 0.0%
3 BPSTCの講師は質問に適切に答えられましたか	11 37.9%	12 41.4%	4 13.8%	2 6.9%	0 0.0%
4 BPSTCの研修に満足したか	非常に満足	満足	まあ満足	あまり満足でない	不満
	11 37.9%	14 48.3%	4 13.8%	0 0.0%	0 0.0%
5 研修で得た知識は製品の設計を見直す上で役立ったか	非常に有益	有益	まあ有益	あまり有益でない	無益
	13 44.8%	13 44.8%	3 10.3%	0 0.0%	0 0.0%
6 新しいテーマの研修を受けたいか	是非に受けたい	受けたい	テーマによる	未定	受けない
	10 34.5%	13 44.8%	2 6.9%	4 13.8%	0 0.0%

質問票回答結果(中堅技術者研修)

就業時間のどの程度を製品試験 1に当てているか	%			
回答者1	40-50			
回答者2	ほとんどなし			
回答者3	25			
回答者4	25			
回答者5	25			
回答者6	40			
回答者7	40-50			
回答者8	20			
回答者9	25			
回答者10	0			
回答者11	5-10			
回答者12	25			
回答者13	60			
回答者14	60			
2 講師の人数、専門分野、能力は 適切か	非常に適切	適切	不適切	わからない
	10 71.4%	4 28.6%	0 0.0%	0 0.0%
3 教材の内容、記述は適切か	5 35.7%	6 42.9%	3 21.4%	0 0.0%
4 研修方法は適切か	9 64.3%	5 35.7%	0 0.0%	
5 トレーニングによってテストへの 理解テストの仕方が変わったか	はい	いいえ		
	14 100.0%	0 0.0%		

質問票回答結果(BPSTC客先)

	非常に満足	満足	まあ満足	やや不満	不満
1 テスト期間には満足しているか	6 30.0%	4 20.0%	7 35.0%	3 15.0%	0 0.0%
2 テストレポートには満足か	10 50.0%	6 30.0%	1 5.0%	3 15.0%	0 0.0%
3 テスト料金は	高い 12 60.0%	適当 8 40.0%	安い 0 0.0%		
4 テストに必要なテストサンプルや提出書類の要求は適切か	多い 3 15.0%	適度 16 80.0%	少ない 1 5.0%		
5 製品は国内向けか	国内 20 100.0%	輸出 0 0.0%	国内と輸出 0 0.0%		
6 IEC60335-1 CBスキームを知っている	知っている 6 30.0%	聞いたことはある 4 20.0%	知らない 10 50.0%		
7 テストに不合格になった際に適切な説明があったか	はい 20 100.0%	いいえ 0 0.0%	わからない 0 0.0%		
8 BPSTCのレポートが海外でも受け入れられることを望むか	15 75.0%	0 0.0%	5 25.0%		

5. 団長所感

団長所感

本プロジェクトは、日本人専門家の適切な指導とプロジェクト・ディレクター及びプロジェクト・マネージャーの強力なリーダーシップのもと、プロジェクトメンバー間で情報・問題意識が共有されC/Pが意欲的に業務に取り組む文化が創り出されており、順調に所期の目的を達成しうるレベルにあることを確認することができた。よって、プロジェクトの残りの5ヶ月間は、技術移転内容の確実な定着と上位目標に向けての道筋をつけることが重要と考えられる。

(1) プロジェクトの意義

現在フィリピンにおいては、国内規格の国際規格（IEC等）への整合化について2020年を目標として取り組んでいるところであり、ニーズの高い電気・電子分野については特に整合化が急がれている。このうちの一部が強制認証の対象となっており、試験検査機関での型式試験が必要とされている。

本プロジェクトは、直接的にはこのような強制認証を中心とした電気・電子製品に係る試験・検査技術の移転が目的である。しかし、国の工業標準に基づく基準認証体制の整備に繋がる協力であり、国内のみならず国際的な製品流通にも資するものである。特に電気・電子分野の基準認証については、APECやASEANの場においても相互認証を視野に入れた整合性の確立が求められており、我が国の協力分野として重要な位置を占める性格のプロジェクトと考えられる。（なお、わが国の電気製品安全法の安全規格は、IEC整合化がまだ実現していない点について留意しておく必要がある。）

また、検査の対象が一般家庭で広く使用される製品の安全性であることから、消費者保護の観点からも重要なプロジェクトである。

(2) CB制度、MRAへの対応等

上記(1)で記したような相互認証に進んでいくためには、検査結果について一定レベル以上の信頼性が確保されることが必要となる。IECEE/CBスキームは正に一定レベル以上の試験所間で国際的に検査結果を活用しようとするものであり、BPSはこの方向に進もうとしている。残りの協力期間において、このために必要なアドバイスの提供が適宜日本人専門家からなされることが期待される。

なお、将来的には、JICA等ODAスキームではなく、日本の民間検査機関とBPSTCとの間でビジネスとしての取り決めに基づく補完・協力関係が成立することが望まれる。そのような流れを促進する観点からJICAとして当面支援すべき点があるか否かについても残りの協力期間に検討していくことが必要と考えられる。

また、基準認証分野において国際的に一定の役割や発言力を確保するためには、規格の策定過程に貢献しうるような経験の蓄積・技術力の向上を意識的に図っていくことも必要である。このためにも、製品に係る事故やトラブルの情報を分析・活用できるようにすることが求められる。

(3) 産業界等との連携

日系企業を訪問した際、市場に氾濫している規格不適合品についてフィリピン政府の取り締まり強化を求める要望があった。BPSは、産業界（製造事業者、流通事業者）や消費者団体と協力して、認証マークの普及・啓蒙、市場の監視等を行う組織（PPSQF）を最近設立したところであり、真面目に品質向上に努める企業を支援する観点からPPSQFの活動を積極的に支援していくことが重要と考えられる。

また、IEC規格への適用は、企業の技術力を向上させ国際競争力を高める上で有効であることから、BPSが計画しているトレーナーズ・トレーニングによる技術の普及活動についても着実な実施が期待される。

(4) 民間検査機関との関係

BPSは、増大する製品検査需要に対応するため民間検査機関を認定し、検査データを活用することとしている。現在のところ具体的な認定事例はないものの、制度上は

可能となっている。このような、民間検査機関の活用は、当面は補完関係にあり有益と考えられるが、中長期的には競合関係となりうることから、将来の両者の関係について何らかのビジョンを持ち、重複投資等の問題が発生しないよう BPSTC の機能拡充を図っていく必要がある。

(5) その他

① BPSTC の管理体制の強化：

BPSTC がプロジェクト終了後日本人専門家の支援を得ることなく自立的に運営していくためには、試行錯誤的であっても自らの判断基準を立て新たな技術上の問題に取り組むような管理体制を作り上げていくことが必要である。当面の具体的課題として、「測定機器のトレーサビリティの確保」、「検査が困難な部品の製品検査上の扱い」等の問題に取り組むことが求められる。日本人専門家の側面からの誘導が期待される。

② 検査サイトの移転計画への対応：

当面、プロジェクトサイトの移転計画はないものの、他機関の施設に間借りしている状況が永久に続くとも考えにくいことから、将来移転計画が具体化する場合も想定し、供与機材の有効活用を確認するため BPS が事前に JICA に報告する旨、M/M に記載した。

③ 技術移転用教材・検査マニュアル等の JICA 資産化：

本プロジェクトの過程で作成された教材やマニュアルについては、今後の類似プロジェクトにおいても有効に活用されるようプロジェクト終了までに JICA の資産として整理することが必要である。その際、実施機関との間で何らかの取り決めが必要であれば、JICA として積極的に対応し、権利関係等について明確にすべきである。

④ 国別実施計画の英文資料の公表：

今回の評価において日本側の援助政策と本プロジェクトの整合性を判断するに当たり JICA の国別実施計画の英文資料の提示をフィリピン側から求められた際、該当する資料がないことが判明した。このため口頭で対応したものの、この国別実施計画については、今後の戦略的な ODA の実施のために対象国に明示されるべきものと考えられる。適切なタイミングでホームページ上に英文で公開されることを期待する。

6. 技術団員報告

フィリピン電気・電子製品技術協力事業終了時評価調査団 団員所見

電気機器試験担当
電気安全環境研究所
初見 隆司

技術協力開始以来三年六ヶ月が経過し、残り半年を残しての評価となるが、BPSTCのカウンターパート(D/C and In-D/C)たちは確実に実力を付けてきていることが今回の調査(ペーパーテスト及びインタビュー)により確認できた。

専門家からの技術移転もスムーズに行われ、技術を継続的に承継し業務に活用していることが彼らの作成したテストレポートからも読みとることができた。

一部のC/Pのレベルは、当所のエンジニアの技術レベルと差は大きく見られない、安全試験の経験量からの差はあるものの、経験を積めば基本的には解決できる問題である。

粗悪クリスマスツリー用ライトが、各国に輸入され、日本においても、不適合と判断されたケースが多くあった。フィリピンにおいても、BPSTCの試験により不適合と判断されたそうである。安全試験レベルの判断に差が無くなった証拠であり、判定の出来る上級エンジニアが育った証拠である。彼らが出現したこともプロジェクトの成果といえるであろう。彼らを核にしてBPSTCは進歩的に進んでいくことは確実である。

BPSTCは、フェーズ1でSwitch device and wires等の技術協力、フェーズ2として、電気・電子製品の技術協力を受け大きく変化し、さらに向上していかなければならない。それは、すでに近隣諸国のSIRIM(マレーシア)、PSB(シンガポール)などの試験所が、CB試験所として活動を開始し始めており、商品流通の多い地域上の関係から、足並みをそろえ、同じCB試験所という土俵にあがるのを、早急の目標としなければならない。

また、Project終了後、現状を維持し、かつ、他分野への業務範囲の拡大が考えられるが、技術移転分野の経験を生かし情報機器分野へ範囲拡大がスムーズに進められるであろう。

私事ではあるが、BPSTCの技術レベルが向上し、同じ仕事を行う技術者として討議/意見交換する事が出来るようになったことはうれしいことであり。将来が楽しいな試験機関の一つであることは言うまでもない。

調査団員所見

財団法人 日本品質保証機構
総合製品安全部門 計画室
高瀬 弥
移転技術計画：電子製品試験

1. 技術移転の進捗状況

協力開始より3年半が経過し、当初予定のすべての技術移転品目に対して、TCP どおりに技術移転が終了し、電子製品試験については、レビューが継続的に実施されていることを確認した。

当初懸念された電子製品の技術移転に不可欠な回路図及び補修部品等の入手については、比国製造者からの協力及び販売部品を購入することにより対処され、困難な状況下での技術移転だったことが窺える。

2. C/P の技術力

技術力については、長期・短期専門家が製品毎に Direct C/P の能力評価を指定の様式を使用し、技術移転の過程及び/又は終了時に実施している評価から、順調に試験技術が理解されていることが窺える。

さらに本調査において、電子製品試験技術の習熟度を確認するため筆記試験を実施し、その結果においては、1.5年という短い技術移転期間ではあるが、電気製品の C/P 経験が十分生かされており、目標とするスコアを達成しており満足できるものと評価できる。また専門家の指導の下 IEC 規格および試験技術についての基本的事項はよく理解されていると感じた。

また、試験マニュアルおよび試験レポート・データ様式も専門家の助言により、C/P 自ら作成出来る実力も備わっており、本プロジェクトの技術移転は順調に進捗しているものと判断できる。

3. 機材の管理状況

機器もメンテナンスについては“Quality Manual”に、また機器の校正については機器毎に“Work Instruction”に文書化された手順が規定され、機器管理担当に専門的にエンジニアを配置し、概ね適切に管理されている。

また機器管理に必要なと思われるデータは、“BPSTC EQUIPMENT MANAGEMENT DATABASE”により記録、管理されている。

しかし、内部校正用参照標準(Reference Standard)については、トレーサビリティ体系図により、国際標準または国家標準にトレーサブルであることを確認したが、校正期限を過ぎている参照標準があり、期限内の校正が望まれる。

4. 部品試験

BPSTC の既存設備では、IEC 規格に基づいた部品試験が不可能な状況にあり、製品に組込まれた部品の試験は実施していないとの事である。しかし、試験所として部品の安全性を何も確認しないで、製品の安全性が担保できるとは思えない。

PN 規格と矛盾があるかもしれないが、規格に基づいた部品試験が完璧に出来なくても、BPSTC の能力の範囲で、少なくとも安全試験エンジニアが納得できる何らかの手法を講じる必要があるものと思われる。

以上

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BPS-JICA AGREEMENT. Officials of the Bureau of Product Standards (BPS) of the Department of Trade and Industry and Japan International Cooperation Agency (JICA) recently held their 3rd Joint Coordinating Committee Meeting to review the agencies' Electrical and Electronic Appliances Testing Project (EEATP) accomplishments in past years and recommend measures to further enhance testing and inspection services that would make the industry more globally competitive. The testing center is located at MIRDC compound, Bicutan, Taguig, Metro Manila. Photo shows Takanori Tanaka of JICA (left) and BPS Director Jesus Motoomull (3rd from right), holding the minutes of discussions while Osamu Nakagaki, resident representative of JICA in the country and Fernanditas Malit, president of Consumer Electronic Products Manufacturers (CEPMA) look on.