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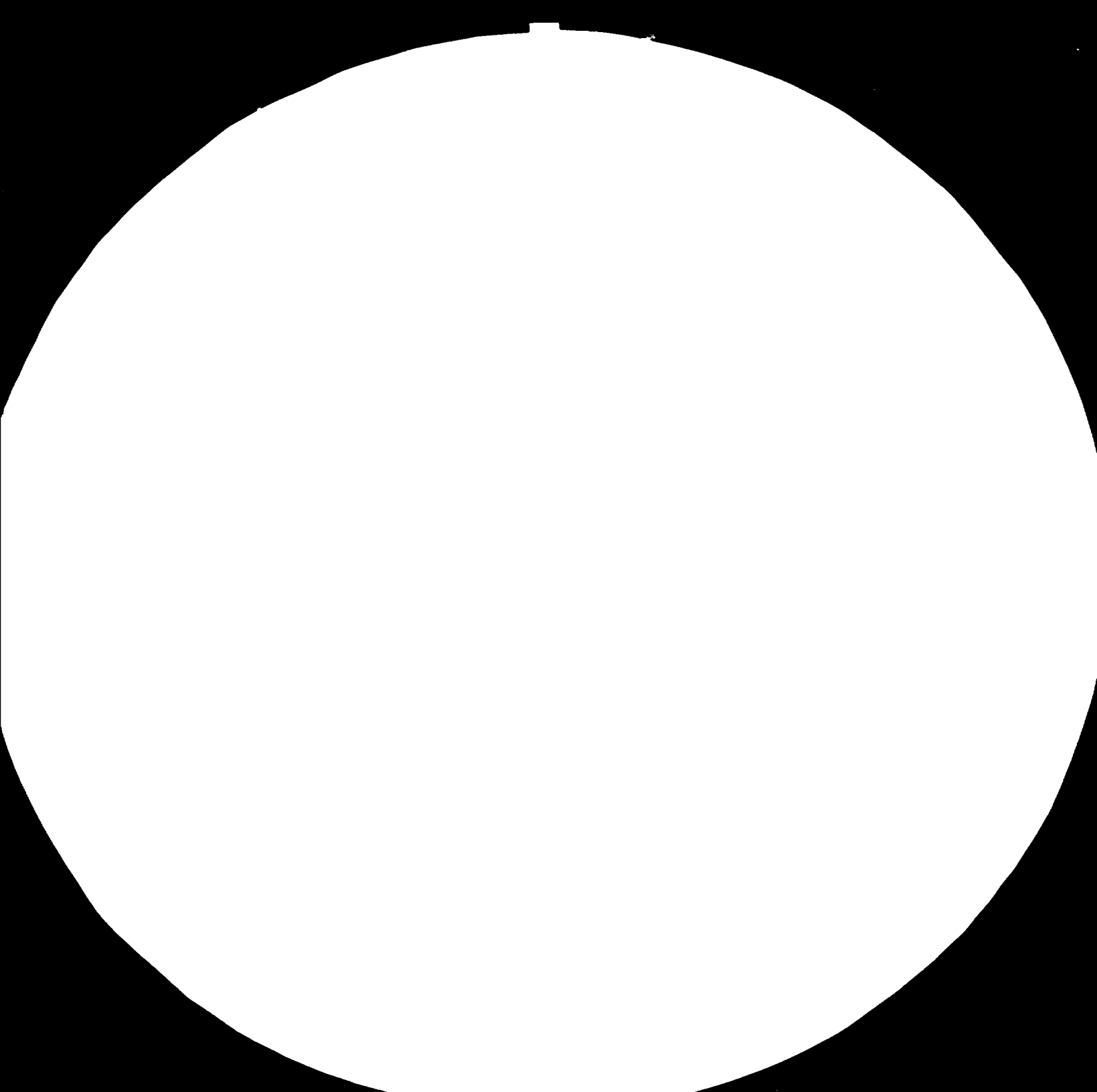
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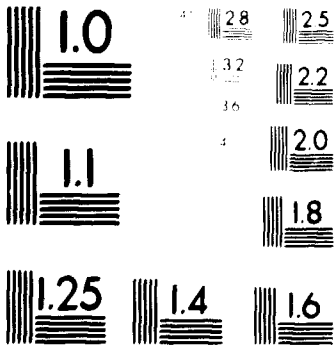
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MICROCOPY RESOLUTION TEST CHART  
 NATIONAL BUREAU OF STANDARDS-  
 STANDARD REFERENCE MATERIAL 1010a  
 (ANSI and ISO TEST CHART No. 2)

28 December 1983

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

13408

Mission to Sri Lanka (Standardization).

by

E. Taitt

Industrial Development Officer

DIO/INFR

5 - 8 December 1983

Standardization and Quality Control

Project DP/SRL/82/003

I. INTRODUCTION

The project DP/SRL/82/003 - Assistance to the Bureau of Ceylon Standards (BCS) was approved in October 1982 in order to supplement and improve the capabilities of the BCS in promoting quality in Sri Lankan industry; establish newly equipped testing laboratories; train local staff in product testing and certification procedures; develop linkages between institutes and industries in Sri Lanka whose common aim is the improvement of quality of manufactured goods, measurement capabilities etc; and to establish twinning agreements between the BCS and other National Standards Bodies (NSB'S) in the region. This project has no Chief Technical Adviser and is managed in the field by the Government counterpart staff.

This mission was carried out by Ms. E. Taitt, Industrial Development Officer, backstopping the project. The purpose of the mission was to attend the scheduled Tripartite Review Meeting and visit the project in order to:

- assess the results achieved in the course of implementation of the project and evaluate the impact of UNDP/UNIDO Technical assistance;
- assess the suitability, co-ordination and effectiveness of the various components of technical assistance (international expertise, training and equipment) provided under this project and identify the factors which might have hampered the achievement of the project's objectives;
- discuss and determine with Government and Project Officials future requirements for the execution of the project.

II. IMPLEMENTATION OF THE MISSION

During the mission I had meetings and discussions on the above-mentioned topics with:

UNDP

Mr. Nigel Bradshaw - Acting Resident Representative

Government

- Mr. Justin Dias - Permanent Secretary, Ministry of Industries and Scientific Affairs
- Mr. D. Epa - Deputy Director, Department of External Resources

Counterparts

- Mr. N.R. De Silva - Director, Bureau of Ceylon Standards, and National Project Director
- Mr. G.M.S. De Silva - Assistant Director, Bureau of Ceylon Standards and Project Executive Secretary

UNIDO

- Mr. Jan Mattsson - Assistant to SIDFA (JPO)
- Mr. D. Thurnell-Read - Consultant in Metrology

The following programme of visits took place:

Monday, 5 December 1983:

UNIDO Office. Met Mr. Mattsson and Mr. G.M.S. De Silva, Project Executive Secretary. Discussed current status of project and the Progress Report to be presented to the TPR. Identified major issues to be raised during TPR. Submitted candidates for post 11-01 - Industrial Production Engineer to Mr. Mattsson for transmittal to Government. Planned activities to be carried out during mission.

Tuesday, 6 December 1983:

Attended TPR Meeting(See Annex I - Report of TPR Meeting).

Tuesday, 6 December 1983:

Discussion held with Mr. D. Thurnell-Read on activities and findings during his 3-month assignment to the project.

Met Dr. G.M.S. De Silva, Project Executive Secretary to discuss changes in project budget revision, and selection of equipment requisition outstanding - Metallurgical Microscope.

Visited one laboratory site of BCS - Food and Materials Testing, Metrology and Workshop.

Met Mr. Nigel Bradshaw, Acting Resident Representative. Discussed the project, results of the TPR and possible modalities for future implementation of the project.

Wednesday, 7 December 1983:

Discussions with Dr. G.M.S. De Silva regarding project implementation.

Met Mr. Justin Dias, Permanent Secretary, Ministry of Industries and Scientific Affairs.

Visit to second Laboratory site - Electrical Textile NDT, etc.

Attended Meeting of Director, and Heads of Divisions of BCS. Discussed divisional functions and participation in project. Discussion held with Mr. Mattsson, UNIDO office, reporting findings of mission. Finalization of report of TPR meeting.

Thursday, 8 December 1983:

Industrial Visit, accompanying two BCS Certification Officers to observe implementation of the Certification Marks Scheme.

As a result of the above-mentioned meetings, relevant questions were discussed and agreed upon. The main points discussed were:

- i) Difficulties experienced by the project in the recruitment of locally hired experts. It was agreed that these experts should now be recruited internationally and a project budget revision was prepared to accommodate this change with no increase in cost to UNDP.
  
- ii) Delay in the construction of the new laboratory complex. -  
Reasons for the delay were given as increase in cost and subsequent changes in requirements for tender procedures. Cabinet clearance on the recommendation of the Ministry of Industries and Scientific Affairs to award the contract to the National Engineering Co-operation is now awaited. This issue was discussed in detail with Mr. Justin Dias, Permanent Secretary, Ministry of Industry and Scientific Affairs. The importance of this pre-requisite to the project was emphasized given the large equipment component scheduled for delivery in 1984. UNIDO explained that a large part of this component is sensitive laboratory equipment which should not be subjected to excessive vibrations through movement and should be stored in climatically controlled rooms to preserve accuracy. It was stated that without proper facilities for housing this equipment UNIDO would have no alternative but to postpone delivery of this component and this in turn would hamper other project activities (testing capabilities, training of nationals, etc.). Mr. Dias promised that the laboratory building would be completed within 15 months of January 1984.
  
- iii) Delay in the implementation of the new BCS structure. -  
It was reported that the new Act, already sanctioned by Cabinet in November 1982, would be cleared by Cabinet for implementation in early 1984. The recommendations of Dr. Geneidy - UNIDO expert to the project in Organization and Management of Standards Institutions - were discussed in detail in relation to the implementation of the new organizational structure.



- iv) Co-ordination of testing capabilities between institutes, industry and also other UNDP projects within Sri Lanka. -

It was recommended that the Bureau should make an assessment of all such facilities available in Sri Lanka in an effort to establish a formal scheme of recognition and accreditation of laboratories for subcontracts to the Bureau.

- v) The establishment of a National Quality Control Committee representing the interest of Government, Industry and the Consumer. UNDP, UNIDO (Sri Lanka) and the Government Counterparts were informed on the present status of recruitment of experts, equipment purchase and execution of fellowships under the project. Questions concerning the recruitment of experts, granting of fellowships and equipment purchase were discussed separately with the counterparts. They were asked to submit as soon as possible the Bureau's requirements for 1984 in order to give UNIDO sufficient time for preparatory action.

The possibility of establishing twinning agreements with National Standards Bodies (NSBs) in the region was discussed with the counterparts. It was noted that the Project Executive Secretary had already written to some NSB's to initiate this action. It was acknowledged that this activity offers a flexible capability of bringing the lesser developed countries the administrative and technical experience of the more advanced NSB's.

### III. CONCLUSIONS AND RECOMMENDATIONS

Despite some difficulties in the recruitment of local experts and delays in the construction of the laboratory complex, most of the remaining project activities have been implemented satisfactorily, close to the established output targets established in the project document. It must be pointed out that the good progress of the project implementation could not have been achieved without full Government and counterpart support.

Efficient management willingness, high integrity of the local leaders and staff is one of the greatest assets for overcoming present and future obstacles in development. It was realised throughout the mission that the development objective of this technical assistance programme can be achieved effectively enough only if logic continuation of the project is secured by all parties concerned.

As a result of the work carried out, I am very satisfied with the work ability of management and counterparts and the following recommendations are made:

- 1) The present premises of the BCS are inadequate and have not sufficient space to allow for the necessary expansion of activities as set out in the project document. This restricting situation exists especially in the testing facilities of the BCS. The construction of the laboratory complex is therefore of paramount importance to the planned activities of the BCS, especially in the areas of testing in relation to the Certification Marking and Pre-shipment inspection schemes. Every possible effort should be given by the Government to ensure that the new laboratories are constructed and quipped at the earliest possible date.
- 2) Implementation of equipment and experts components and placement of fellows should be rapid to facilitate implementation of the project within its limited 3-year period.
- 3) The organizational structure of the BCS should be reviewed, taking into account the recommendations of the expert Mr. A. Geneidy. The BCS should be given more authority to exercise its routine duties and some policy matters.
- 4) The BCS should continue to pursue efforts to establish twinning agreements with National Standards Bodies in the region. It is recommended that the Project Executive Secretary, Dr. G.M.S. De Silva, should visit the Indian Standards Institution (ISI) to formalize such an agreement. This is important since the ISI has a wealth of experience and innovative techniques from which the BCS could benefit.

- 5) It is also recommended that the new Director of the BCS, Dr. G.M.S. De Silva should undertake a study tour to some of the more developed NSB's in the region to observe their administrative and organizational functions with the view to improving these facilities of the BCS.

#### IV. ACKNOWLEDGEMENTS

During the period of the mission several visits were paid and discussions were held with numerous UN and Sri Lankan officials. I am very grateful to these people who contributed so much during my stay in Sri Lanka.

Special thanks should be given to Dr. N.R. De Silva, Director BCS, Dr. G.M.S. De Silva, Project Executive Secretary, and the Assistant to the SIDFA, Mr. Jan Mattsson for the kind assistance and help in making the necessary arrangements for the activities of the mission and for the hospitality and co-operation which they extended during the mission.

Thanks are expressed herewith to Mr. Nigel Bradshaw, Acting Resident Representative, Sri Lanka. His readiness to assist and useful advice was highly appreciated.

TRIPARTITE REVIEW MEETING

DP/SRL/82/003 - Standardization & Quality Control

Meeting held on 6 December 1983 with the following participants :

Mr. D Epa, Deputy Director, Department of External Resources  
Mr. P.G. Karunasiri, Senior Assistant Secretary, Ministry of  
Industries & Scientific Affairs  
Dr. N.R. de Silva, Director, Bureau of Ceylon Standards & National  
Project Director.  
Dr. G.M.S. de Silva, Assistant Director, Bureau of Ceylon Standards  
and Project Executive Secretary  
Ms. E. Taitt, Industrial Development Officer, UNIDO, Vienna  
Mr. D. Thurnell-Read, Consultant in Metrology, UNIDO  
Mr. J.A. Mattsson, JPO. UNIDO

The meeting was chaired by Mr. Epa.

A. Project Activities and Outputs

A detailed review of project activities and outputs was made at the meeting. As a basis for the discussion served, besides the progress report, a list of output targets for 1983 (see Annex). This list had been prepared by Dr. G.M.S. de Silva at the request of UNDP during the previous TPR meeting. The following are the highlights of the discussion.

Implementation of new SLSI structure

Dr. N.R. de Silva reported that the new Act, which was sanctioned by the Cabinet already in November 1982, had been inadvertently held up in the Ministry of Industries and Scientific Affairs (MISA). However, a draft of the Act had recently been printed and it was hoped that it would be in effect by early 1984. Dr. N.R. de Silva declared that the delay had effected the Bureau adversely, particularly regarding inspection procedures and certain areas of certification.

An extract of recommendations made by Dr. Geneidy, UNIDO-Consultant, on the organization of the Bureau was distributed and discussed in the context of the new Act. Dr. N.R. de Silva expressed that some amendments to the Act might have to be considered in the light of Dr. Geneidy's findings. He promised to examine the final report carefully and inform UNDP/UNIDO on the implementation of recommendations. The meeting noted the need for more freedom and flexibility of the Bureau within the Government structure and for close connection between the Bureau and the industry. It was decided to recommend the MISA to consider attaching the Bureau to another appropriate division, e.g. its Policy Division instead of the Scientific Affairs Division. In addition it was recommended that serious consideration should be given to Dr. Geneidy's proposal for the establishment of a national quality control committee which should include not only Government Agencies but also representatives from the public and private sector industries and consumer organizations.

Construction of new SLSI headquarters, including laboratory building

Dr. N.R. de Silva informed about the reasons for the delay i.e. cost increases and subsequent requirements for tender procedures. The MISA had recently recommended to award the contract to the National Engineering Corporation. However, this decision has to be followed by Cabinet clearance. According to an optimistic forecast, the building might be ready by January 1985, eight months behind schedule.

Ms. Taitt expressed UNIDO's deep concern over the delay, especially since a significant equipment component is scheduled for 1984. A great deal of this equipment is sensitive laboratory equipment which should be installed in rooms with controlled climate and should not be subjected to excessive vibrations through movement. At present, she could see no other alternative than postponing the delivery of such equipment which would in turn result in delays in implementing other project activities. Mr. Read added that the existing testing laboratories of the Bureau operate under unsatisfactory conditions. In his final report he would indicate which equipment had to be postponed.

Mr. Mattsson reminded that the construction of the building is a pre-requisite of the project. Furthermore, the signed project document clearly states that, if this pre-requisite has not materialised by June 1984, UNDP might either suspend or terminate its assistance. Unless very decisive steps had been taken by the Government by the time of the next TPR, scheduled for June 1984, UNDP would certainly have to re-consider the project on these grounds.

The representatives of the Government also agreed on the urgency of this matter and promised to take necessary action. Mr. Epa stressed the importance of securing adequate financing.

Experts in Industrial/Production Engineering and Quality Control

During 1983 all efforts to recruit the above experts locally had failed and it had already been decided to recruit these experts internationally for a period of only four months each (instead of six plus three months each). The question of funding the cost increase had previously been discussed between UNDP, the Government and the project authorities. However, in the alternative Ms Taitt suggested to re-allocate for this purpose certain project savings, mainly on the fellowships as the training had proved less costly than anticipated. The meeting agreed to this proposal and requested Ms Taitt and Dr. G.M.S. de Silva to finalize the project revision after the meeting.

Co-ordination of Testing Facilities in Sri Lanka

Mr. Mattsson raised the question of co-ordination of testing facilities in certain areas between different UNDP projects on the one hand and not least between different Government agencies on the other. Textile testing was one such field. Ms Taitt recommended the Bureau to study all testing facilities available in Sri Lanka and to establish a formal

scheme for recognition of laboratories for sub-contract to the Bureau. Dr. G.M.S. de Silva informed that some work along those lines is already under way. Mr. Read added that the field of rubber and plastics testing appeared to be particularly urgent to review. Another example mentioned was materials testing. Dr. N.R. de Silva mentioned that a successful scheme between the Bureau and NARA in sea food quality control is already in operation.

#### Other Activities/Output

Most of the remaining project activities have been implemented satisfactorily although in a few instances, there have been consequential delays. Even so, the achievement to-date is very close to the established output targets indicated in the project document.

In addition, the participants discussed at some length the importance of publicity and promotional work.

#### B. Prospects of Achieving Project Objectives

The participants expressed concern that the delay in erecting the new laboratory building would retard the project in the future.

#### C. Utilization of Project Results

Dr. N.R. de Silva explained that the project had already rendered some positive results, mainly through provision of laboratory equipment and training. This was evident from the improved performance of the Bureau according to the various indicators discussed earlier.

#### D. Project Design

The participants found the project design still adequate. Ms. Taitt and Dr. G.M.S. de Silva were requested to prepare an up-dated work plan for 1984.

#### E. Conclusions and/Recommendations

The following conclusions and recommendations were made :

- a/ The construction of the new building is most vital for a successful continuation of the project.
- b/ Posts of Expert in Industrial/Production Engineering (11.01; 1984; 4 m/m) and Quality Control (11.02; 1985; 4m/m) will be established for international recruitment. A project revision re-allocating funds for this purpose is to be made shortly
- c/ A detailed work plan for 1984 is to be prepared.
- d/ The Ministry of Industry and Scientific Affairs is to consider (i) which of its divisions is most suitable for the Bureau to function within, and (ii) the establishment of a national quality control committee representing Government Industries and consumers.

(UPDATED VERSION)  
T.P. ON 6TH DECEMBER 1983

ANNEX I

Goals	Measuring Indicator	1983	Actual for 1983 <i>to-date</i>
<u>1. Establishment of Standard Specifications</u>			
Standard Specifications published	No. of standards (cumulative)	170	138
<u>2. International Standards Work</u>			
Participation in International Standardization activities ISO and IEC	No. of ISO, IEC Technical Committee Sub-Committee Secretariats (cumulative)	02	02
	No. of Technical Committees accepted for active participation (cumulative)	45	45
<u>3. Establishment of Quality Control functions in State controlled industries</u>			
Establishment of Quality Control functions	No. of enterprises (cumulative)	03	01
Certification Marking	No. of permits issued (cumulative)	06	03
<u>4. Upgrading the facilities of the Laboratory</u>			
Enhancement of test capability	No. of product lines for which testing facilities are available (cumulative)	300	275
Increase in Revenue	Revenue Rs.	200,000	180,000
<u>5. Library and Technical Information Services</u>			
Provision of Library documentation and technical information	i. No. of books	625	556
	ii. No. of journals (cumulative)	100	122
	iii. No. of standards received (cumulative)	1050*	1760
Acquisition of computer and other related equipment	-	-	-
6. Training of SLSI staff (m/m)	-	18	5.8
<u>7. Printing &amp; Publicity Activities</u>			
To maintain an efficient printing and publication department	No. of standards printed	95	73

\*Updating of foreign standards etc.

Goals	Measuring Indicator	1983	Actual for 1983
<u>8. Training of Personnel</u>			
Training of personnel from Industry	a) <u>Top Management</u>		
	i. No. of programmes	02	01
	ii. No. of persons	50	22
	b) <u>Middle Management of industry</u>		
	i. No. of programmes	02	04
	ii. No. of persons	50	105
	c) <u>QC Technicians</u>		
	i. No. of programmes	03	03
	ii. No. of persons	75	64
9. To sign standard agreements with foreign standard organizations	No. of agreements (cumulative)	-	-
10. Twinning arrangements with foreign standard organizations	No. of countries (cumulative)	-	-
11. Inspection of export products	a) No. of products (cumulative)	11	18
	b) No. of inspections (cumulative)	4600	3820
	c) No. of certificates issued (cumulative)	3900	3923
12. Inspection and registration of premises where export products are processed, manufactured, packed or stacked	a) No. of inspections (cumulative)	128	145
	b) No. of certificates (cumulative)	32	178
13. Revenue, export inspection and registration of premises	Revenue, (cumulative) SL Rupees, Millions	3.5	2.64



