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22586

NML-01-0156

Final report on UNIDO project US/MOZ/00/134B
July 2001

Dr F Hengstberger

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The CSIR's National Metrology Laboratory supports South Africa's global competitiveness through the provision of internationally acceptable measuring standards and measurements.

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The National Metrology Laboratory is partially sponsored and supported by the Department of Trade and Industry.



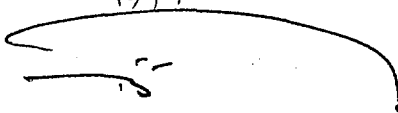
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Approval Sheet

Prepared for Manufacturing and Materials Technology
Contract (Project) HLYD1 8600 86GB

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Checked by	J Phala		2001-07-20
Approved by	BF Denner		2001-07-20

Distribution List

Internal	External
F Hengstberger	V Koloskov, UNIDO (10 copies)
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Abbreviations

CSIR	-	Council for Scientific and Industrial Research, South Africa
INNOQ	-	Instituto Nacional de Normalizacao e Qualidade, Mozambique
NMI	-	National Metrology Institute
CSIR - NML	-	CSIR - National Metrology Laboratory, South Africa
PTB	-	Physikalisch-Technische Bundesanstalt, Germany
SABS	-	South African Bureau of Standards
SADC	-	Southern African Development Community
SADCMET	-	SADC Cooperation in Measurement Traceability
UNDP	-	United Nations Development Program
UNIDO	-	United Nations Industrial Development Program

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1. INTRODUCTION

Equipment to establish mass, volume and length metrology facilities at the National Institute for Standards and Quality (INNOQ) in Mozambique was donated by the South African Bureau of Standards, the Physikalisch-Technische Bundesanstalt (Germany) and the CSIR-National Metrology Laboratory (South Africa) under a programme coordinated by the SADC Cooperation in Measurement Traceability (SADCMET). UNIDO then provided the funding under its Integrated Program for Mozambique to have this equipment repaired and refurbished in Pretoria (South Africa), transported to Mozambique and re-assembled and commissioned in Maputo. The re-assembly and commissioning was also used to provide initial training in the use of the equipment to INNOQ staff.

This Final Report covers the additional work carried out on the contract since the Interim Report (NML-01-0155). The work was carried out by the CSIR-National Metrology Laboratory (South Africa) under contract to UNIDO.

2. INSTRUMENT EVALUATION, SELECTION AND SERVICE

Completed as reported in Interim Report NML-01-0155, section 2.

3. PACKAGING AND TRANSPORT OF EQUIPMENT TO MAPUTO

Completed as reported in Interim Report NML-01-0155, section 3.

4. INSTALLATION AND COMMISSIONING OF EQUIPMENT IN MAPUTO

Completed as reported in Interim Report NML-01-0155, section 4.

5. TRAINING ON THE OPERATION OF THE SYSTEM

Completed as reported in Interim Report NML-01-0155, section 5.

6. DEMONSTRATION OF ESTABLISHED FACILITIES

Completed as reported in Interim Report NML-01-0155, section 6.

7. RELATED TASKS (NOT PART OF THIS CONTRACT)

Since the Interim Report there has also been progress with regard to the equipment donated by the PTB, which is not directly part of this contract. The latest developments in this regard are:

- the mass standards and the environmental recorder donated by the PTB have been delivered to the NML for calibration,
- the calibration of the mass standards will be performed jointly by Mr Sidonio dos Santos (INNOQ) and NML metrologists during his attachment to the NML in September / October 2001 (part of his training in mass metrology),
- the mass standards will be taken to Maputo by Mr dos Santos once the calibration has been performed (early in October 2001),
- the formalities for the delivery of the PTB-donated water distillation equipment (see Interim Report) to Maputo still have to be organized through the Maputo Field Office and UNDP, and
- the water distillation equipment has to be installed and commissioned at INNOQ thereafter.

As an alternative to the separate delivery of the water distillation equipment to Maputo, this might also possibly be combined with the delivery of the envisaged mobile metrology laboratory to INNOQ.

8. ACKNOWLEDGEMENTS

The author and the project team wish to thank the UNIDO metrology specialist, Dr Otto Loesener-Diaz, the UNIDO field office staff in Maputo, Mr Jan Thomas Odegard and Mr Steven Dils, and the Team Leader of the Integrated Programme, Dr Mohamed Eisa, for their support and guidance. They also acknowledge the material support provided in terms of equipment, calibrations and technical assistance by the South African Bureau of Standards, the Physikalisch-Technische Bundesanstalt (Germany), the CSIR-National Metrology Laboratory (South Africa) and the SADC Cooperation in Measurement Traceability (SADCMET).