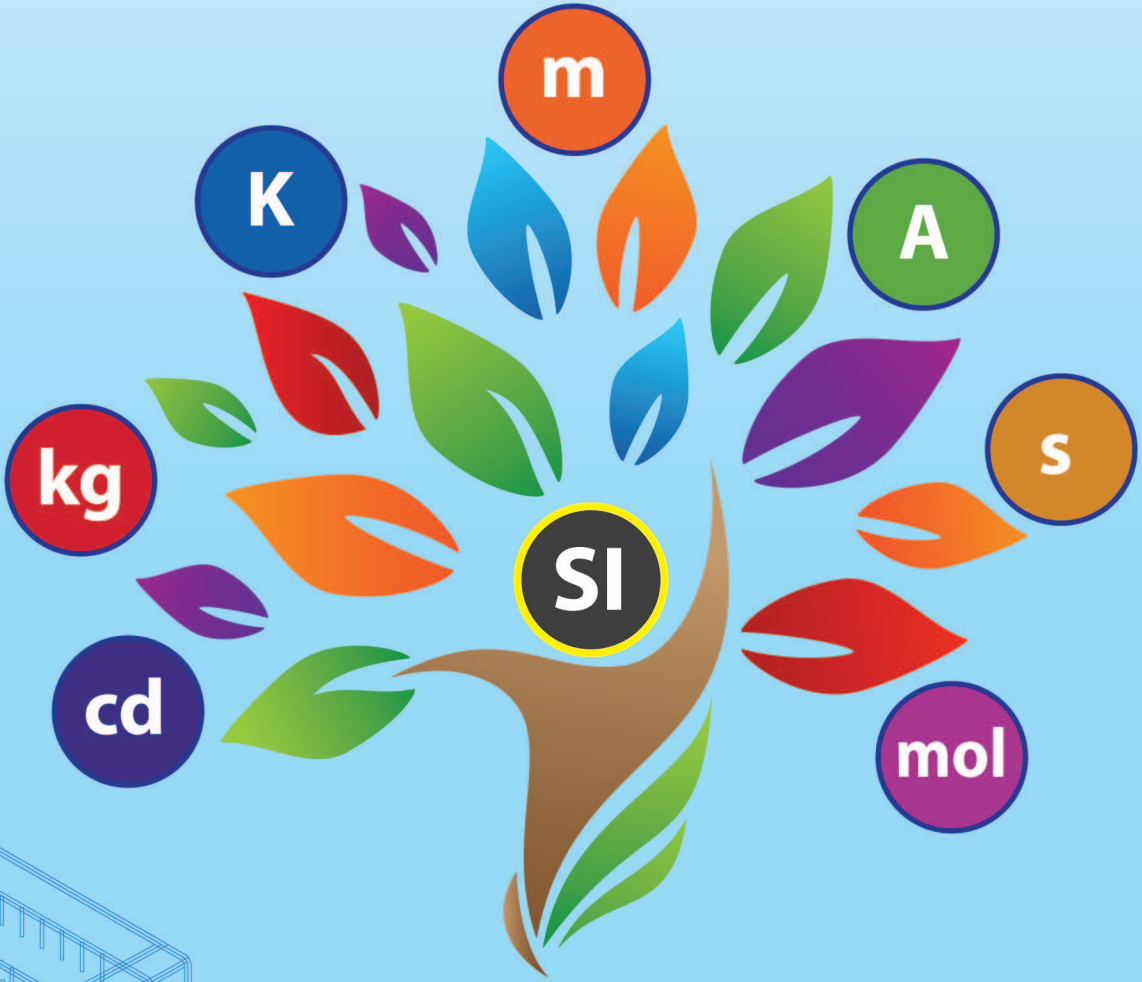




මිනුම් ඒකක, ප්‍රමිති හා සේවා දෙපාර්තමේන්තුව
அளவீட்டு அலகுகள், நியமங்கள் மற்றும் சேவைகள் திணைக்களம்
MEASUREMENT UNITS, STANDARDS AND SERVICES DEPARTMENT

කර්මාන්ත හා වාණිජ කටයුතු, දිගුකාලීනව අවතැන්වූ පුද්ගලයන් නැවත පදිංචි කිරීම,
සම්ප්‍රදායික සංවර්ධන සහ වෘත්තීය පුහුණු හා නිපුණතා සංවර්ධන අමාත්‍යාංශය
கைத்தொழில், வாணிப அலுவல்கள், நீண்டகாலமாக இடம்பெயர்ந்த நபர்களின் மீள்குடியேற்றம்,
கூட்டுறவுத்துறை அறிவீடுத்தி, தொழில் பயிற்சி மற்றும் திறன்கள் அறிவீடுத்தி அமைச்சு

MINISTRY OF INDUSTRY AND COMMERCE, RESETTLEMENT OF PROTRACTED DISPLACED PERSONS,
CO-OPERATIVE DEVELOPMENT AND VOCATIONAL TRAINING & SKILL DEVELOPMENT



2019

කාර්යසාධන වාර්තාව සහ වාර්ෂික ගිණුම්
செயலாற்று அறிக்கைகளும் ஆண்டு கணக்குகளும்
PERFORMANCE REPORT AND ANNUAL ACCOUNTS

**PERFORMANCE REPORT
AND
ANNUAL ACCOUNTS
2019**

**MEASUREMENT UNITS, STANDARDS AND
SERVICES DEPARTMENT**

CONTENT

Message of the Director.....	1
Chapter 01 - Institutional Profile	
Introduction	
1.1 The Department and Its Functions.....	3
1.2 Vision, Mission, Objectives of the Department.....	6
1.3 Key Functions.....	7
1.4 Organization Chart.....	19
1.5 Contact details of district offices.....	20
1.6 Funds coming under the Departments.....	21
1.7 Details of the Foreign Funded Projects.....	21
Chapter 02 - Progress and the Future Outlook	
2.1 Establishment of Traceability of Measurements – 2019 (Measurement Traceability)...	26
2.2 Participation of Inter-Laboratory Comparisons in 2019 (Inter Laboratory Comparisons)....	26
2.3 Research and Development - 2019.....	27
2.4 Training and Consultancy Conducted by NML in 2019.....	27
2.5 Progress of International Relationships in 2019.....	27
2.6 Revenue of Calibration Services Provided by NML in 2019.....	29
2.7 Pattern Approval of Weighing and Measuring Instruments in 2019.....	31
2.8 Verification Income on District Basis.....	32
2.9 Number of units verified on district basis 2015-2019.....	33
2.10 Verification programme Income in 2019.....	35
2.11 Raids, Cases and Fines Income 2018,2019.....	35
2.12 Number of Awareness Programmes Conducted - 2019	38
2.13 Quarterly Progress of Awareness Programmes in - 2019.....	40
2.14 Distribution of Private Entrepreneurs Engaged in Commercial Activities - 2019	41
2.15 Registrations of Private Entrepreneurs Engaged in Commercial Activities - 2019.....	42

Chapter 03 - Overall Financial Performance for the Year

3.1 Statement of Financial Performance.....	44
3.2 Statement of Financial Position.....	46
3.3 Statement of Cash Flows.....	48
3.4 Performance of the Revenue Collection.....	50
3.5 Performance of the Utilization of Allocation.....	51
3.6 In terms of F.R.208 grant of allocations for expenditure to this Department/District Secretariat/Provincial Council as an agent of the other Ministries/ Departments.....	53
3.7 Performance of the Reporting of Non-Financial Assets.....	53

Chapter 04 - Performance Indicators

4.1 Performance indicators of the Institute (Based on the Action Plan).....	55
---	----

Chapter 05 - Performance of the achieving Sustainable Development Goals (SDG)

5.1 Indicate the Identified respective Sustainable Developments Goals.....	57
--	----

Chapter 06 - Human Resource Profile

6.1 Cadre Management 2019- The cadre composition – 2019.12.31.....	60
6.2 The effect of the shortage or excess in human resources to the performance of the institute.....	63
6.3 Human Resource Development.....	64

Chapter 07 - Compliance Report.....	72
-------------------------------------	----

Message of the Director

Welcome to the Measurement Units, Standards & Services Department's Annual Report for the year 2019. Year 2019 was a period of transition and progress on many fronts of the department. We continued to innovate, and we strengthened all extents of metrology related activities. We streamlined our measures & operations, and that commitment contributed to solid physical & financial progress. Our vision is to implement a well-protected customer community through an accurate and reliable measurement. At present, we are an institution with annual earnings of approximately LKR 450 million and works disciplinary staff comprised of nearly 250.

As in any other country, metrology system in Sri Lanka has three levels such as scientific metrology, industrial metrology and legal metrology. Measurement Units, Standards & Services Department (MUSSD) is Sri Lanka's National Metrology Institute and brings together these three levels of metrology under a single organization. MUSSD plays the role of the Central Metrology Authority and it is empowered for scientific metrology and legal metrology as well as the coordination of industrial metrology. Establishing maintenance and dissemination of national measurement standards in Sri Lanka executed by the National Measurement Laboratory (NML) established under MUSSD.

During year 2009, a decision was made by MUSSD top management to construct a new metrology complex, which includes national metrology laboratory, legal metrology division & MUSSD administration to implement the act no. 35 of 1995. It was the most important scientific decision ever made to strengthening the metrology infrastructure in Sri Lanka and we were able to realistic it by 2016. At present, as the apex metrology authority of Sri Lanka, the MUSSD is responsible for establish, maintain & disseminate the national measurement standards in compliance with international standards, ensuring justice & equity for producers, traders, metrological & other service providers & consumers, through the regulatory & service activities based on measurements to uplift the quality of life and standards of Sri Lankans.

Also, on 16 November 2018, the General Conference on Weights and Measures (CGPM) agreed one of the most significant revisions to the International System of Units (the SI) since its inception. The SI units is now based on a set of constants each linked to the laws of physics and have the advantage of being able to embrace further improvements in measurement science and technology to meet the needs of future users for many years to come. For the way forward, as an associate member of CGPM, MUSSD has already appeared research and development into new measurement methods, including those using quantum phenomena, underpin the change.

Comply with the revision as an associate member of CGPM, measurement units Standards and Services Department has already steered national metrology infrastructure to the new direction through it's research and development activity.

I am very proud of these accomplishments as well as those reflected in this year's Annual Report.



S.N.Akuranthilaka

Director of Measurement Units, Standards & Services.

Chapter 01

Institutional Profile/Executive Summary

Measurements Units, Standards and Services Department

Performance Report and Annual Accounts - 2019

The aim of this report is to present the basic policy, projects and programs of Measurement Units, Standards & Services Department (MUSSD) which have been implemented and to report the progress of the department in the year 2019.



1. Introduction

1.1 The Department and Its Functions

Measurement Units, Standards and Services Department (MUSSD) was established under the Measurement Units, Standards and Services Act No. 35 of 1995. MUSSD functions under the purview of ministry of Internal Trade, Food Security and Consumer Welfare.

MUSSD has moved to the Science Center of Tech City in Mahenawatta, Pitipana, Homagama in December 2015 from a land situated in Colombo 05 (area of 135 perches) due to insufficiency building and land space to accomplish the national requirements and the future developments of the field of Metrology.

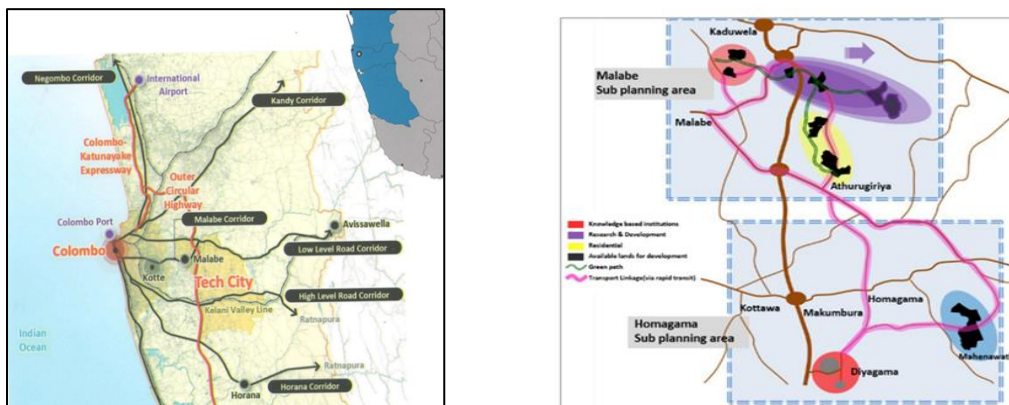


Figure 1: Location of Tech City (Source: Innovation hub of Asia- Tech City Sri Lanka Western Region Tech City Development Project)

The department is responsible for, providing accurate and reliable measurement procedures and metrology services, safeguarding the interests of the consumer by implementing the law and regulations of the act, maintaining and updating the National Measurement Standards in conformity with the international measurement system.

Each country in the world has a special establishment responsible to realize National Measurement system and establish, maintain and disseminate the national measurement standards. It is generally called National metrology Institute (NMI). MUSSD bears the responsibilities of the NMI in Sri Lanka. Establishment, maintenance, and dissemination of national measurement standards in Sri Lanka are done by the National Measurement Laboratory (NML) established under the department. Moreover, various calibrations and verification services for measuring instruments used in fields such like industry, engineering, environment, health protection, road safety etc; are provided by MUSSD.

Further, the recommendations of International Organization of Legal Metrology (OIML) are followed in legal metrological activities. Pattern approval of electronic and mechanical weighing and measuring instruments, initial and annual verification of such instruments are being done according to those recommendations.

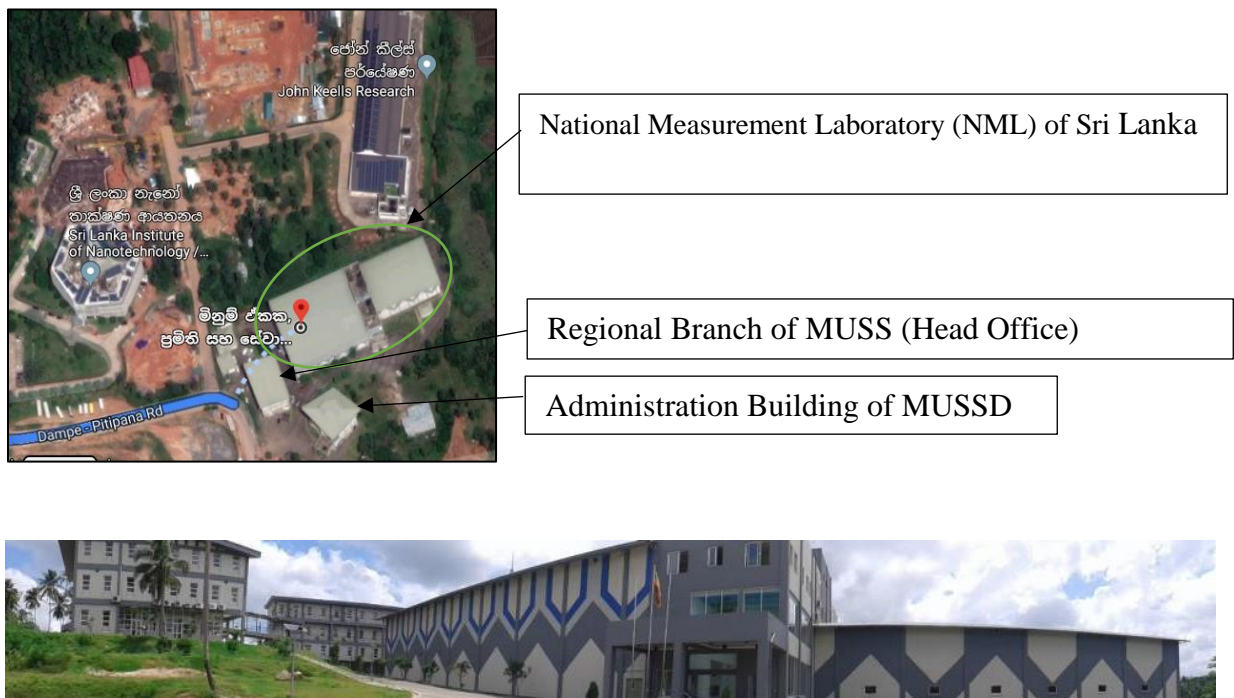


Figure 2: Measurement Units, Standards and Services Department (MUSSD)

1.1.1 Metrology

Metrology is the science of measurements and its applications. Measurements related to various quantities such like mass, length, time, pressure, volume, electric current, electric resistance etc; are frequently necessary in the daily life activities. All the scientific, researches and regulatory activities carried out internationally and locally for sustaining a unity of physical quantities and units can be defined to be Metrology.

Metrology can be classified into three categories.

01. Scientific metrology: the development and organization of the highest level of measurement standards
02. Industrial metrology: the satisfactory functioning of measurement instruments used in industry, production and testing
03. Legal metrology: the assurance of correctness of measurements where these have an influence on the transparency of trade, on law enforcement, on health, on safety and on the environment

Out of these fields industrial metrology and legal metrology are extensively rely on the basis of scientific metrology.

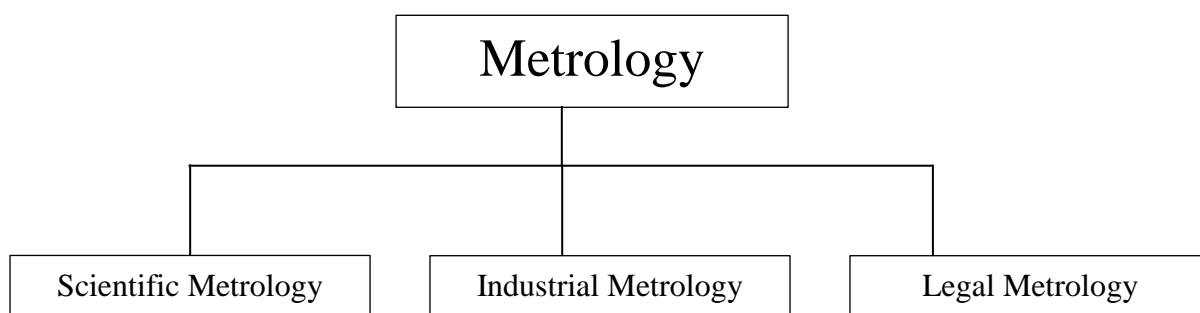


Figure 3: Categories of Metrology

The laboratory within MUSSD is known as National Measurement Laboratory according to article(3) of section (II) of the Act. Further the department responsible for establishment, maintenance and dissemination of national measurement standards as per part III, for measurements use in trade as per part IV and for measurements use in industry as per part V and part VI. Thus the department is responsible for National Measurement System (NMS) which consist of three sections: scientific metrology, industrial metrology and legal metrology.

1.2 Vision, Mission, Objectives of the Department

Vision



Accurate and reliable measurements for well protected customer community

Mission



To establish, maintain & disseminate the national measurement standards in compliance with international standards, ensuring justice & equity for producers, traders, metrological & other service providers & consumers, through the regulatory & service activities based on measurements to uplift the quality of life and standards of Sri Lankans.

Objectives



The department is to act as the Apex Institution for Metrology (Science of Measurements) in Sri Lanka and to provide the essential basis to foster the Fundamental, Industrial, and Legal Metrology infrastructure development of the nation by implementing the Measurement Units, Standards & Service Act No.35 of 1995.

1.3 Key Functions

1.3.1 Activities of Scientific Metrology

Scientific metrology is major out of three fields in metrology. MUSSD as the apex Institution for Metrology in Sri Lanka. It is the subject concerns the establishment of quantity systems, unit system of measurement, development of new measurement methods, establishment, definition, and realization of local and international measurement standards, and transferring traceability to the user in the society through the hierarchy of such standards. Also, scientific metrology covers theoretical and practical aspects of identification and resolving measurement problems and related issues.

Implementation of activities related to Scientific Metrology is as follows.

1. Establishment of National Measurement System and measurement units of the country by formation the National Measurement Laboratory
2. Realization, establishment, updating, maintenance and dissemination of National Measurement Standards
3. Establishment and maintenance of the National Measurement Standards so as to traceable to International Measurement Standards (SI)
4. Dissemination and promotion of measurement parameters and technology necessary for different fields
5. Upgrading the calibration and measurement capabilities (CMC) by participating in international bilateral and multilateral inter-comparisons related to various quantities
6. Metrology researches
7. Generating Sri Lanka Standard Time and broadcasting via www.sltime.org

1.3.1.1 National Measurement Laboratory (NML)

MUSSD operated National Measurement Laboratory (NML) with 64 laboratory rooms in its new premises in Mahenawatta, Pitipana, Homagama to establish national unit system, to maintain National measurement Standers and disseminate traceability to calibration and testing laboratories, regulated bodies and industrial and legal metrology areas. Currently, MUSSD operates laboratories for 10 measurement fields.

Contact details of NML

Laboratory	Head of Laboratory	Contact Details
Mass	Mr.R.D.M.Alanka	0112-182262
Dimensional	Mr.A.D.D.Naminda	0112-182267
Time and Frequency	Mr.R.G.S.A.Perera	0112-128265
Temperature	Mr.S.N.Akuranthilaka	0112-182256
DC Electricity	Mr.R.G.S.A.Perera	0112-128265
AC Electricity	Dr.G.W.C.Wijayasundara	0112-128257
Pressure	Ms.J.S.M.Silva	0112-182264
Volume	Mr.H.L.I.S.Sampath	0112-182266
Electric Power and Energy	Mr.R.D.M.Alanka	0112-182262
Chemical	Mr.S.D.I.Dias	0112-182258
Gas	Mr.R.G.S.A.Perera	0112-182265
Humidity	Mrs.K.S.Mallawarachchi	0112-182263

Standards of National Measurement Laboratory

Measurement	Primary Standards
Mass	1 kg national prototype of kilogram 1 mg – 20 kg E1 weight set.
Length	Standard gauge block (0.5 mm to 100 mm), Grade K
Time & Frequency	Cs – Primary frequency standard.
Temperature	7 fixed points cover Mercury triple point to Aluminium freezing point (-39 °C to 660 °C)
DC Electricity	1 V, 10 V – Zener DC voltage reference Resistance Standards 1 Ω, 10 kΩ
AC - DC	transfer Standard; (up to 1000 V and 20 A)
Pressure	Hydraulic pressure balance range 200 MPa Pneumatic pressure balance range 7 MPa
Volume	Micro pipette calibration unit (1 μL to 1 mL) Volumetric standards upto 150 L
Electrical power and energy	Phase comparator (10 mA to 120 A)
Chemical	Secondary standard buffer solutions

1.3.1.2 Establishment of Traceability of Measurements

Establishment of measurements traceability for measurements in Sri Lanka is a responsibility of National Measurement Laboratory, National measurement standards are calibrated by a National Measurement Laboratory of a foreign country according to the Measurement Units, Standards and Services act. The foreign national measurement laboratory should be an internationally accepted laboratory by publishing Calibration and Measurement Capabilities (CMC s) in key Comparison Data Base (KCDB) of Bureau of Weights and Measures (BIPM) website.

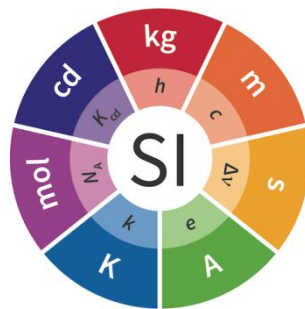
1.3.1.3 Participation of Inter-Laboratory Comparisons

Inter laboratory comparisons are exercised to maintain the equality of measurements done by calibration and testing laboratories.

The National Measurement Laboratory participates international inter comparisons to demonstrate that measurements done in Sri Lanka has similar values with measurements done in other contrives. This is important to prove the competence of measurements done in Sri Lanka to reduce trade barriers in international trade.

Furthermore, National Measurement Laboratory facilitate local inter laboratory inter comparisons exercise to verify the accuracy of calibration certificates issued by local calibration laboratories.

1.3.1.4 Maintenance of SI units



Member states of International Bureau of Weights and Measures (BIPM) voted on 16 November 2018 to revise the SI units, changing the definition of the kilogram, the ampere, the kelvin and the mole.

All SI units are defined in terms of constants that describe the natural world from 20 May 2019 from this decision that made at the 26th meeting of the General Conference on Weights and Measures (CGPM). This will assure the future stability of the SI and open the opportunity for the use of new technologies, including quantum technologies, to implement the definitions. The seven defining constants of the SI are given in Table 3.

Seven defining constants of the SI

Defining constant	Symbol	Numerical value	Unit
Ground-state hyperfine transition frequency of Cs	$\Delta\nu_{\text{Cs}}$	9 192 631 770	Hz
Speed of light in vacuum	c	299 792 458	m s^{-1}
Planck constant	h	$6.626\,070\,15 \times 10^{-34}$	J s
Elementary charge	e	$1.602\,176\,634 \times 10^{-19}$	C
Boltzmann constant	k	$1.380\,649 \times 10^{-23}$	J K^{-1}
Avogadro constant	N_{A}	$6.022\,140\,76 \times 10^{23}$	mol^{-1}
Luminous efficacy	K_{cd}	683	lm W^{-1}

Definition of SI units:

The second

The second, symbol s, is the SI unit of time. It is defined by taking the fixed numerical value of the cesium frequency $\Delta\nu_{\text{Cs}}$, the unperturbed ground-state hyperfine transition frequency of the caesium-133 atom, to be 9 192 631 770 when expressed in the unit Hz, which is equal to s^{-1} .

The meter

The meter, symbol m, is the SI unit of length. It is defined by taking the fixed numerical value of the speed of light in vacuum c to be 299 792 458 when expressed in the unit m s^{-1} , where the second is defined in terms of the cesium frequency $\Delta\nu_{\text{Cs}}$.

The kilogram

The kilogram, symbol kg, is the SI unit of mass. It is defined by taking the fixed numerical value of the Planck constant h to be $6.626\,070\,15 \times 10^{-34}$ when expressed in the unit J s, which is equal to $\text{kg m}^2 \text{s}^{-1}$, where the meter and the second are defined in terms of c and $\Delta\nu_{\text{Cs}}$.

The ampere

The ampere, symbol A, is the SI unit of electric current. It is defined by taking the fixed numerical value of the elementary charge e to be $1.602\,176\,634 \times 10^{-19}$ when expressed in the unit C, which is equal to A s, where the second is defined in terms of $\Delta\nu_{\text{Cs}}$.

The kelvin

The kelvin, symbol K, is the SI unit of thermodynamic temperature. It is defined by taking the fixed numerical value of the Boltzmann constant k to be $1.380\,649 \times 10^{-23}$ when expressed in the unit J K^{-1} , which is equal to $\text{kg m}^2 \text{s}^{-2} \text{K}^{-1}$, where the kilogram, meter and second are defined in terms of h , c and $\Delta\nu_{\text{Cs}}$.

The mole

The mole, symbol mol, is the SI unit of amount of substance. One mole contains exactly $6.022\,140\,76 \times 10^{23}$ elementary entities. This number is the fixed numerical value of the Avogadro constant, N_A , when expressed in the unit mol^{-1} and is called the Avogadro number.

The amount of substance, symbol n , of a system is a measure of the number of specified elementary entities. An elementary entity may be an atom, a molecule, an ion, an electron, any other particle or specified group of particles.

The candela

The candela, symbol cd, is the SI unit of luminous intensity in a given direction. It is defined by taking the fixed numerical value of the luminous efficacy of monochromatic radiation of frequency 540×10^{12} Hz, K_{cd} , to be 683 when expressed in the unit lm W^{-1} , which is equal to cd sr W^{-1} , or $\text{cd sr kg}^{-1} \text{ m}^{-2} \text{ s}^3$, where the kilogram, meter and second are defined in terms of h , c and ΔV_{cs} .

The SI was previously defined in terms of seven base units and derived units defined as products of powers of the base units. The seven base units were chosen for historical reasons, and were, by convention, regarded as dimensionally independent: the meter, the kilogram, the second, the ampere, the kelvin, the mole, and the candela. This role for the base units continues in the present SI even though the SI itself is now defined in terms of the defining constants above.

1.3.1.5 Generation and Broadcasting the Standard Time of Sri Lanka

MUSSD possesses the honor to be the pioneer of generating and broadcasting the Standard Time in Sri Lanka since 2011. Sri Lanka Standard Time was launched by Time and Frequency Laboratory of NML as a new project in order to establish the island wide unity of time. For the purpose a Rubidium Atomic Clock has been established to generate the accurate time in Sri Lanka in accordance with Universal Time Coordinates (UTC) and the new website www.sltime.org was launched in April 2011 to broadcast the accurate time. People are now able to set their time correctly via the website at any time in the day. All the respective parties are informed to set their clocks with correct time using the website.

Presently time system consists of Cesium primary frequency standard. Time system was calibrated and now contributing to determination of UTC (Coordinated Universal Time) at BIPM. Time links to BIPM has been established for the traceability. NTP (Network Time Protocol) servers were established to dissemination of accurate time.

1.3.1.6 Research and Developments

Experiments are conducted to assure the quality of maintenance and distribution of national measurement standards of National measurement laboratory. Further, calibration procedures are developed cautiously to calibrate measuring instruments use in the industry.

1.3.2 Activities of Industrial Metrology

Industrial Metrology concerns how to apply measurement science to manufacturing and industrial processes. Ensuring the compliance of use of measuring instruments, industrial metrology addresses the application of measuring instruments in industry, and quality control of them. There the management of measuring instruments and industrial calibration are done according to the requirements of a quality production process.

Activities carried out by the department related to Industrial Metrology are as follows.

1. Providing necessary laboratory facilities for calibration of weights, measures, weighing and measuring instruments/systems used in production industry (including laboratory calibrations and on-site calibrations)
2. Inspection and verification of large-scale measuring instruments established in production and service industries
3. Providing necessary training and consultancy on resolving measurement problems raised in industrial measurements

1.3.2.1 Industrial Calibrations

Calibration facilities for pressure gauges, thermometers, weights, scales and length measuring instruments, electrical measuring instruments, moisture meters, laboratory balances etc; which are used in industry, engineering or any other related field are now available at MUSSD. Calibration certificates are also issued with such calibrated instruments.

Industrial calibration is one of the main services provided by the National Measurement Laboratory. The calibration provided by NML is given in Table 4. Amendments of calibration charges are as per the extraordinary gazette No. 1921/54 dated 2 July 2015. The charges will be revised in 2020.

Calibration services provided by NML

	Laboratory	Calibration Facility
1	Thermometry Laboratory	<ol style="list-style-type: none"> 1.Clinical Thermometer 2.Industrial & laboratory Thermometers, Digital Thermometers 3.Dial Thermometer Probe 4.RTD & Thermocouple Thermometer 5.Liquid in Glass Thermometer 6.Maximum Registered Thermometer 7.Min Max Thermometer 8.Wall Thermometer 9.Surface Probe 10.Infrared Thermometer 11.Standard Platinum Resistance Thermometer (Comparison Method) 12.Standard Platinum Resistance Thermometer (Fixed Point Method) 13.Industrial Thermocouple (Comparison Method) 14.Industrial Thermocouple (Fixed Point Method) 15.Liquid & Dry Block Calibration Bath 16.Temperature Chart Recorder 17.Laboratory Oven & Furnace 18.Autoclave 19.Incubator & Water Bath 20.Deep Freezer & Refrigerator (Single Chamber, Dual Chamber) 21.Cold Room (Room Temperature Measurement) 22.Cold Room (With Thermal Switch Indicator) 23.Thermal Switch/Controllers 24.Wood moisture meter 25. IR moisture meter 26. Moisture balance

	Laboratory	Calibration Facility
2	Electric Power and Energy Laboratory	1.kWh meter (single phase) 2.kWh meter (Three phase) 3.kVA meter (Three phase) 4.Potable power/energy meter (single phase) 5.Potable power/energy meter/energy (Three phase) 6.Reference Meter (Used in meter testing benches/single phase) 7.Reference Meter (Used in meter testing benches/three phase) 8.Energy Meter (laboratory/single phase) 9.Energy Meter (laboratory/Three phase) 10.Power Meter (single phase/stationary/Mobile/Lab) 11.Power Meter (three phase/stationary/Mobile/Lab)
3	Volumetric Laboratory	1.Un Subdivided Measures 2.Volumetric measures 3.Measuring cylinders 4.Provers and large volume tank 5.Micropipettes, Pipettes & Burettes
4	Pressure Laboratory	1.Gas Pressure gauges and Transducers 2.Hydraulic Pressure gauges and Transducers 3.Sphygmanometer 4.Digital Blood Pressure Meter
5	Mass Laboratory	1.Weights (OIML Class E ₂ , F ₁ , F ₂ , M) 2.Industrial Weights (stainless steel / other) 3.Balances – Electronic & Mechanical (OIML accuracy class I, II, III & IV) 4.Paper Scale 5.Crane Scale 6.Hanging Scale 7.Weighbridges 8.Button Puller machine 9.Hopper Scale

	Laboratory	Calibration Facility
6	Dimension Laboratory	1.Gauge Blocks 2.Measuring Ruler 3.Measuring Tapes 4.Calipers 5.Micrometers 6.Height gauges 7.Indicator gauges 8.Thickness gauges 9.Bore gauges 10.Filer gauges 11.Flatness measurements 12. Parallax measurements
7	Electric Time and Frequency Laboratory	1.Voltmeter 2.Ammeter 3.Ohmmeter 4.Multi-meter 5.Resistor 6.Time/Stop watch 7.Frequency/Tachometer 8.Oscilloscope 9.Function Generator
8	Chemical Laboratory	1.Breath Alcohol Analyzer 2.PH Meter
9	Humidity laboratory	1. Digital Hygrometers 2. Dry -Wet Bulb Thermometer

1.3.2.2 Training and Consultancy

A series of programme was launched in 2019 to offer training opportunities necessary for the field of metrology for industry. At present MUSSD has had enough resource persons to offer training on Metrology and Uncertainty Calculations.

1.3.3 Activities of Legal Metrology

Legal Metrology concerns the field of legal control of measurement. It is the process of certifying measures and measuring instruments to be complied with measurement laws in the country after the inspection of such instruments and measures according to the legal requirements on the use of measuring instruments. Necessary legal provisions have been provided via the act No. 35 of 1995. Accordingly, law and regulations made are implemented throughout the sectors like health, public safety, environment, enabling taxation, protection of consumers and fair trade.

Activities under legal metrology implemented by Measurement Units, Standards & Services Department have been defined in the act and its regulations. Weighing and measuring found in all the commercial transactions are controlled by the measurement law. The act empowers the department to regulate legal metrological activities in the following ways.

1. Calibration of working standards and establishment of such standards in district basis (according to the act the District Secretary serves as the Superintendent of Measurement Units, Standards and Services and working also standards are kept under the custody of him)
2. Initial and annual verification of weights, measures, weighing and measuring instruments used in trade
3. Registration of manufacturers, importers, repairers and sellers of weights, measures, weighing and measuring instruments used in trade
4. Protect consumers by implementing the penal section of the act
5. Consumer awareness on Legal Metrology
6. Granting pattern approval of weights, measures, weighing and measuring instrument used in trade and industry (This service is provided by the National Measurement Laboratory)
7. Inspection and control of pre-packed commodities
8. Verification of measuring instruments related to health sector, environment protection, and road safety
9. Prosecution against persons who commit fraud measurements by conducting market raids

1.3.3.1 Re-verification of Working Standards

Working standards used for verifying weights, measures and weighing and measuring instruments related to trade and industry have been retained under the custody of secretary of each district in the country. Calibration of working standards is done at the National Measurement Laboratory. Working standards include standard weights, standard volume measures, and standard-length measures.

1.3.3.2 Pattern Approvals

The pattern approval is an attestation of any weight, measure or weighing/measuring instrument by a recognized laboratory after performing pattern test to check whether they are in conform with the measurement law in Sri Lanka, before they are sent to the market by a manufacture or before they are imported. Pattern approval is a technical assessment. The original model of the instrument is undergone through a series of tests at the National Measurement Laboratory. The design and the structure of each of the components of the instrument are checked against the recommendations on type approval defined by the International Organization of Legal Metrology (OIML). Subsequently, based on the evaluation of the test results a pattern approval is granted by MUSSD for the intended weights, and measuring instruments including vehicle emission testing units and fuel dispensers.

1.3.3.3 Verifications, Inspections, and Raids of Weighing and Measuring Instruments Conducted on District Basis

Inspections and raid programmes are implemented by MUSSD to ensure that the weights, measures, weighing and measuring instruments used in the country are utilized in conformity with the weights and measures laws and regulations of the country. These programmes are very helpful, in terms of legal metrology, not only to protect the customer but also to ensure an accurate and reliable measuring practice in the country.

Verification of weights, measures, weighing and measuring instruments used in trade is done by Inspectors of Measurement Services and Devices who assume duties at Measurement Units, Standards & Services Divisions of each District Secretariat. Verification centers are held at Divisional Secretariats and any other government institutes of each district under the pri approval of the District Secretariat. Moreover, a mobile verification unit for weighbridges has been commissioned to verify annually all weigh bridges placed in every district. All fuel dispensers mounted at every fuel station in the country are verified once every year. For the particular purpose, a Fuel Dispensers Verification Unit has been introduced. Further, verification of vehicle speed detectors and vehicle emission testing instruments has been started.

1.3.3.4 Inspection of Pre-Packed Commodities

The commodities that have been packed before selling to the consumers are called Pre-Packed Commodities. Inspection of pre- packages is performed according to OIML regulations to verify whether the net content (weight, volume, length etc.) mentioned on the package is actually available inside the package. Inspection of pre- packages is performed according to OIML regulations.

When inspecting pre-packages, net contents of pre-packages that are arbitrary sampled from pre- packed goods available in the market are measured. Here number of pre- packages specified in the regulations are inspected and statistically analyzed. The final decision on the pre- packages by the department after would be based on the statistical analysis and regulations made on prepackages by the department after comparing the net content and the results against the recommended tolerance/permissible error. Further details are referred to the extraordinary gazette No. 1499/7 dated 29 May 2007.

1.3.3.5 Registration of Private Entrepreneurs Engaged in Commercial Activities Controlled Over Legal Metrology

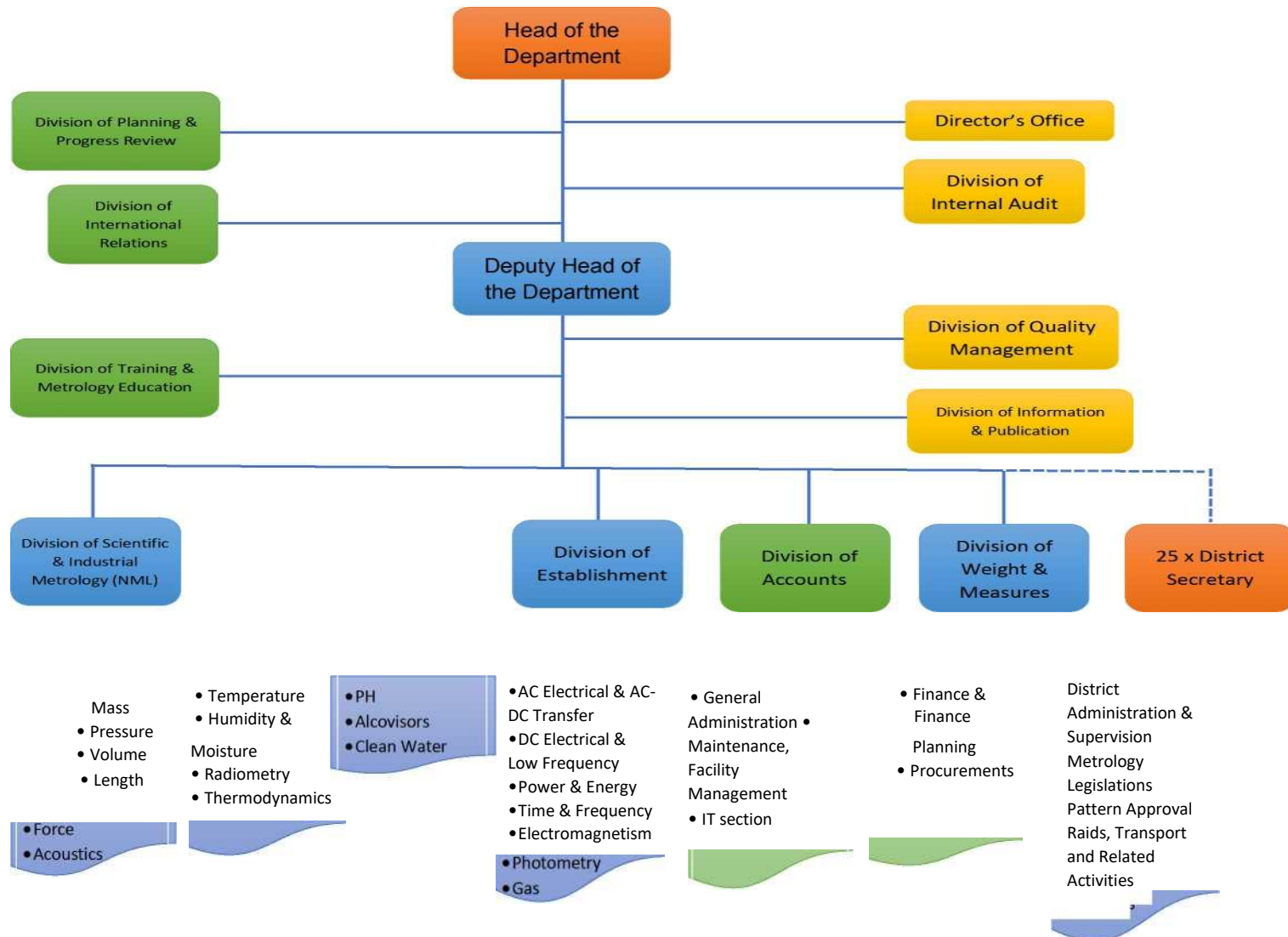
Any organization or individual who is engaged in selling, manufacturing, importing or repairing of weights, measures, weighing and measuring instruments must registered in the department as per section 21 of the Measurement Units, Standards and Services Act. For that, the person must apply via a prescribed application form determined by the Director of Measurement Units, Standards and Services and the corresponding fees must be paid. The certificate issued in such registrations will be expired on 31st December of the year.

Before starting a business of repairing weights or measuring instruments, a person should appear for a practical examination conducted by MUSSD to prove his competencies and qualification related to such repair activities. Examination fees should be paid by the person. Further, the workshop of the applicant is inspected by the officers of MUSSD to check whether the necessary tools and equipment are readily available for the repair purposes.

The repair license will be issued if the director stifferly with the results of practical test and site inspection. The license cannot be alienated, Even the owner of the business changed, it is mandatory to have qualified technical person in the bossiness.

Registration fees and all related details have been published in the extraordinary gazette No. 1921/54 dated 2 July 2015.

1.4 Organization Chart



1.5 Contact details of district offices

District office	Address	Telephone No.
Colombo	District Secretary, Measurement Units, Standards and Services Division, District Secretariat Narahenpita, Colombo 5	0112-391079
Gampaha	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Gampaha	0332-222900
Kaluthara	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Kaluthara	0342-222635
Puttlam	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Puttalama	0322-266189
Kurunegala	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Kurunagala	0372-222134
Kegalle	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Kegalle	0352-232620
Ratnapura	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Rathnapura	0452-226299
Galle	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Galle	0912-222233
Matara	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Matara	0412-237079
Hambantota	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, hambantota	0472-256247
Monaragala	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Monaragala	0552-277406
Badulla	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Badulla	0552-222292
Nuwara Eliya	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Nuwaraeliya	0522-222610
Kandy	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Kandy	0812-222233
Mathale	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Mathale	0662-222235
Anuradhapura	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Anuradhapura	0252-225190
Polonnaruwa	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Polonnaruwa	0272-226706

District office	Address	Telephone No.
Batticaloa	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Batticaloa	0652-224465
Ampara	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Ampara	0632-222236
Vavuniya	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Vavuniya	0242-222187
Jaffna	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Jaffna	0212-222355
Mullaitivu	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Mullaitivu	0212-290045
Mannar	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Mannar	0232-222232
Kilinochchi	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Kilinochchi	0212-285662
Trincomalee	District Secretary, Measurement Units, Standards and Services Division, District Secretariat, Trincomalee	0262-050800

1.6 Institutions/Funds coming under the Ministry/Department/Provincial Council

There is a Measurement Service Fund under the Measurement Units, Standards and Services Act No. 35 of 1995 of the Department of Measurement Standards and Services.

1.7 Details of the Foreign Funded Projects

1.7.1 Memberships

Relations in metrological perspectives are created with various countries in order to maintain the international and regional corporation of Metrology. It also helps to establish international traceability of measurement and overcome the technical barriers arise in trade. International relations are essential further to provide a secure basis for scientific and other measurement practices we have and to reduce technical disputes arising in many countries.



Associate member Meter Convention and General Conference of Weights and Measures.

The Meter Convention (Convention du Meter) is the body that created the BIPM which is an intergovernmental organization under the authority of the CGPM and the supervision of the CIPM as its administrative and scientific organ.

The General Conference on Weights and Measures (CGPM) is made up of delegates of the governments of the Member States and observers from the Associates of the CGPM. The CGPM meets in Paris, usually once every four years. One of main activity of CGPM is to discuss and examines the arrangements required to ensure the propagation and improvement of the International System of Units (SI).

MUSSD has signed meter convention on behalf of government of Sri Lanka and become an associate member of CGPM in 2007.



Signatory of CIPM Mutual Recognition Arrangement (CIPM-MRA)

The CIPM Mutual Recognition Arrangement (CIPM MRA) is the framework through which National Metrology Institutes demonstrate the international equivalence of their measurement standards and the calibration and measurement certificates they issue. The outcomes of the Arrangement are the internationally recognized (peer-reviewed and approved) Calibration and Measurement Capabilities (CMCs) of the participating institutes. Approved CMCs and supporting technical data are publicly available in the key Comparison (KCDB) in BIPM web site.

MUSSD has become a signatory of CIPM-MRA in 2007 and is in the process of publishing CMC values in KCD



Full Membership of The International Organization of Legal Metrology (OIML)

The International Organization of Legal Metrology (OIML) is an intergovernmental treaty organization which develops model regulations, standards and related documents for use by legal metrology authorities and industry, provides mutual recognition systems which reduce trade barriers and costs in a global market etc. The OIML can be considered as “international standard-setting body” of the World Trade Organization's Technical Barriers to Trade Agreement. OIML publications should therefore be applied, when appropriate, by all signatories of the TBT Agreement when developing technical regulations.

The International Committee of Legal Metrology (CML) is the functional decision-making body of OIML. Sri Lanka is full member state of OIML and MUSSD is the main permanent contact of the OIML designated by government of Sri Lanka.



Full Member The Asia Pacific Metrology Programme (APMP)

The Asia Pacific Metrology Programme (APMP) is a grouping of national metrology institutes (NMIs) from the Asia-Pacific region engaged in improving regional metrological capability through the sharing of expertise and exchange of technical services among Member laboratories. APMP is also a Regional Metrology Organization (RMO) recognized by the International Committee for Weights and Measures (CIPM) for the purpose of worldwide mutual recognition of measurement standards and of calibration and measurement certificates.

MUSSD is a member of APMP since 1977. The department actively participate nine technical committees and three focus group.

1.7.2 Benefits of projects



PTB-Sri Lanka bi-lateral Project Strengthening Quality Infrastructure in Sri Lanka

PTB is the National Measurement Institute (NMI) of Germany. It supports developing and emerging countries to develop and apply an internationally recognized quality infrastructure that suits the countries' needs. Objective of the PTB-Sri Lanka bi-lateral project is to increase the use of the enhanced offer of quality-assurance services based on international good practices by Small and Medium-sized Enterprises (SME) located in the northern region. The project includes the core institutions of the national Quality Infrastructure (MUSSD, ITI, SLSI and SLAB) as well as regional laboratories, local chambers and federations in the north.



SAARC-PTB Project Strengthening regional integration and cooperation in the field of quality infrastructure in South Asia

The project focuses on capacity development in quality infrastructure by facilitating the exchange of expertise and information among SAARC Member States. MUSSD has been a beneficiary of the SAARC-PTB project (i.e. Training programmers, workshops) of the project as the NMI of Sri Lanka. Furthermore, MUSSD has participated inter laboratory comparisons organized under SAARC-PTB project to demonstrate measurement capacities of the national measurement Laboratory (NML) of MUSSD. This project is financing by Federal Ministry for Economic Cooperation and Development (BMZ), Germany through National measurement institute of Germany, PTB.



UNIDO Project

UNIDO has been working closely with Sri Lanka's national quality infrastructure (NQI) institutus to facilitate the strengthening of compliance and quality infrastructure services. Special areas of focus are those underpinning the export-oriented sectors, such as spices and processed foods. These activities take place within the framework of a European Union (EU)–Sri Lanka trade-related assistance project, funded by the EU.



MEDEA-PTB Project

The project aims to improve the ability of the regional metrology specialist networks in Asia – the Asia Pacific Metrology Programme (APMP) and the Asia-Pacific Legal Metrology Forum (APLMF) – to promote the metrological systems of developing economies, which provide special offers for national metrology institutes (NMI) and legal metrology authorities (LMA) in Asia, respectively. This project is financing by Federal Ministry for Economic Cooperation and Development (BMZ), Germany through National measurement institute of Germany, PTB.

Chapter 02

Progress and the Future Outlook

2.1 Establishment of Traceability of Measurements – 2019

Standard / Measurement	National Institute of Metrology / Reference Standard
Standard Platinum Resistance Thermometer	National Institute of Metrology China (NIM - china)
Standard tape	National Institute of Metrology, Finland
Gauge blocks (Grade K, Steel)	National Institute of Metrology, Finland
Gauge blocks (Grade K, Tungsten Carbide)	National Institute of Metrology, Finland
Long gauge blocks (Grade 0, Steel)	National Institute of Metrology, Finland
OIML E1 Class Weights	National Institute of Metrology Thailand (NIMT)
Hydraulic Pressure Balance (0 -200 MPa)	National Institute of Metrology Thailand (NIMT)
Pneumatic Pressure Balance (0 -7 MPa)	National Institute of Metrology Thailand (NIMT)
PH Measurements	Secondary Buffer Solution
Alcovisor Verification	Reference Materials
GPS receiver calibration system	Participated a program for calibrating time transfer equipment of APMP – Group 2 labs organized by Telecommunication Laboratories (TL),Taiwan

2.2. Participation of Inter-Laboratory Comparisons in 2019

National Measurement Laboratory has been participated to international inter – laboratory comparisons in field of Temperature, volume and time and frequency.

Measurement	Inter-comparison
Platinum resistance thermometer (0°c – 419.527°c)	Bi – lateral interoperation with National Institut of Metrology China (NIM-china) APMP T - HC.3: 2019
Liquid in glass thermometer	with National Metrology Institutes in the Asia Pacific Region. APMP TCT - LIGTs - EL: 2019
Volumetric measurements in 1000 µl , 50 µl , 100 µl , and 100 ml	With National Metrology Institute of Vietnam (VMI)
Volumetric measurements in 1000 ml and 30 ml	With ZMK Institute in Germany
Strop watch display upto 3 digits	With 12 National Metrology Institutes in Asia pacific Region (TCTF – 01-TC 120)

2.3 Research and Development

- Fluke 1595A, a super thermometer, was used to install the ITS-90 thermometer in 2019.
- Establishment of a new setup and methodology for revising 500 kg (weights) working standards this year.
- Applications were submitted to the Accreditation Board of Sri Lanka in September 2019 for accreditation of the Laboratory of Pressure and the Laboratory of Time and Frequency.
- ITS - 90 Research on Temperature Scale and Research on Mass Measurements were conducted by two special degree students in Physics, University of Sri Jayewardenepura.
- Revised the time comparison system with BIPM to determine conversion times.

2.4 Training and Consultancy Conducted by NML in 2019.

Traning	Number of participants	Income Rs.
Dimensional Metrology	15	112,500.00
Uncertainty Estimation in measurement science (chemical and Testing)	15	112,500.00
Evaluation & Expression of Uncertainty in Measurement	21	157,500.00
Liquid in Glass Thermometry metrology	12	90,000.00
Uncertainty Estimation in measurement science (chemical and Testing) (National Medicine Authority)	26	78,000.00
MASS Metrology	11	82,500.00
Total	100	633,000

2.5 Progress of International Relationships in 2019

2.5.1 The Asia Pacific Metrology Programme (APMP)

MUSSD has actively participated in following APMP meetings in 2019.

- Two officials participate in the CABUREK program in Indunisia in support of the MEDEA project.
- APMP mid-year DEC meeting in Phillipines.
- Three APMP Technical Committee meetings and related workshops in Singapore.
 - Technical Committee meeting -Temperature (TCT)
 - Technical Committee meeting -Time and Frequency (TCFF)
 - Technical Committee meeting -Electricity and Magnetism (TCM)

2.5.2 Sri Lanka bi-lateral Project (PTB)

Following activities have been done with the support of PTB-Sri Lanka bi- lateral project in 2019.

- Providing advice for obtaining international recognition for pressure, temperature, mass measurements performed at the National Measurement
- Assisting a Deputy Director of the Department of Measurement Standards and Services to participate in training on Laboratory QUISP Blended learning

2.5.3 SAARC-PTB Project

Following activities have been done with the support of SAARC-PTB project

- Two Person of MUSSD participated the Best practice in Metrology law Development workshop of the SAARC-PTB project-stage 2 which held in Thimphu, Bhutan.
- Assisting two MUSSD officials to attend the inaugural workshop of SAARC-PTB Project Phase 2 in Bhutan in 2019.
- Two Person of MUSSD participated the inter laboratory comparison workshop of the SAARC-PTB project in Thimphu, Bhutan.
- Assisting two MUSSD officials to attend the 2019 Inter-Laboratory Workshop in New Delhi, India.

2.5.4 UNIDO Project

Following activities have been done with the support of UNIDO project

- Opportunity for 2 members of MUSSD to participate training on ISO 17025:2015
- Support to 4 members of MUSSD to participate in Heavy Metal Analysis in Drinking Water.

2.5.5 MEDEA-PTB Project

Following activities have been done with the support of MEDEA Project

- Support to 2 members of MUSSD to participate OIML/APMLF training course, in China
- Training Course on the Verification and Pattern Approval in Malaysia.
- “Capacity building In Technical and Scientific Organization using regional Experience and Knowledge workshop (CABUREK) in Indunisia.
- Assisting two officers in a training course on number correction held in Malaysia.

2.6 Revenue of Calibration Services Provided by NML in 2019

Month	Mass Laboratory		Length Laboratory		Thermometry Laboratory		Electric Time and Frequency Laboratory		Electric Power and Energy Laboratory	
	No. of Units	Income Rs.	No. of Units	Income Rs.	No. of Units	Income Rs.	No. of Units	Income Rs.	No. of Units	Income Rs.
January	135	162,000.00	17	34,500.00	12	26,770.00	12	47,000.00	4	6,100.00
February	73	157,650.00	40	81,500.00	4	8,250.00	1	2,000.00	3	3,600.00
March	113	362,200.00	49	100,000.00	7	10,100.00	0	-	1	2,500.00
April	15	31,900.00	3	6,000.00	0	-	5	18,000.00	0	-
May	0	-	21	41,000.00	34	70,550.00	22	44,000.00	1	1,200.00
June	102	122,450.00	8	15,500.00	25	67,700.00	5	10,000.00	0	-
July	173	184,150.00	8	13,000.00	10	30,100.00	4	8,500.00	0	-
August	172	184,150.00	29	53,900.00	18	36,100.00	1	2,000.00	1	2,500.00
September	89	100,700.00	16	48,300.00	5	7,400.00	0	-	0	-
October	3	173,700.00	29	60,025.00	15	34,150.00	6	34,500.00	2	4,700.00
November	0	-	3	5,750.00	2	3210.00	0	-	1	5,000.00
December	7	132,942.00	23	45,950.00	1	1250.00	4	10,500.00	1	1,200.00
Total	882	1,611,842.00	246	505,425.00	133	295,580.00	60	176,500.00	14	26,800.00

Month	Volumetric Laboratory		Pressure Laboratory		Chemical Laboratory		Vehicle speed Gun Laboratory		Gas Andyzer	
	No. of Units	Income Rs.	No. of Units	Income Rs.	No. of Units	Income Rs.	No. of Units	Income Rs.	No. of Units	Income Rs.
January	10	17,860.00	6	9,800.00	5	25,000.00	12	24,000.00	0	-
February	0	-	8	13,400.00	8	40,000.00	5	10,000.00	0	-
March	0	-	7	12,100.00	9	45,000.00	3	6,000.00	0	-
April	1	600.00	5	8,700.00	8	40,000.00	3	6,000.00	0	-
May	6	4,800.00	0	-	5	25,000.00	2	4,000.00	0	-
June	0	-	5	9,500.00	6	30,000.00	2	4,000.00	0	-
July	2	2,500.00	2	3,800.00	5	25,000.00	0	-	0	-
August	6	12,000.00	11	20,900.00	1	5,000.00	0	-	0	-
September	46	40,400.00	7	13,300.00	1	5,000.00	1	2,000.00	0	-
October	5	3,500.00	6	11,400.00	0	-	0	-	0	-
November	0	-	8	48,000.00	0	-	2	4,000.00	1	4,500.00
December	0	-	0	-	1	5,000.00	1	2,000.00	0	-
Total	76	81,660.00	65	150,900	49	245,000.00	31	62,000.00	1	4,500.00

2.7 Pattern Approval of Weighing and Measuring Instruments in 2019

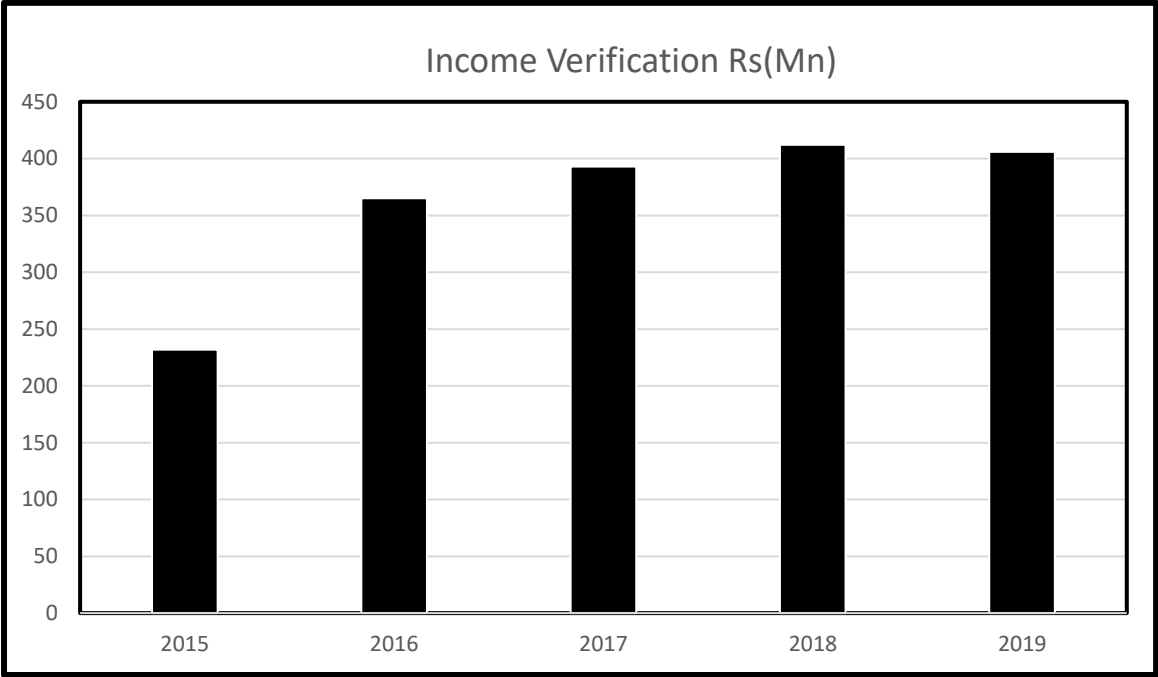
Type of Pattern Approval	Number of units	Income
Electronic Weighing Machines	106	1,418,000
Volumetric Measures	1	4,000
Fuel Dispensers	16	200,000
Taxi Meters	1	20,000
Vehicle Emission Units	1	4,000
Total	125	1,646,000

2.8 Verification Income on District Basis

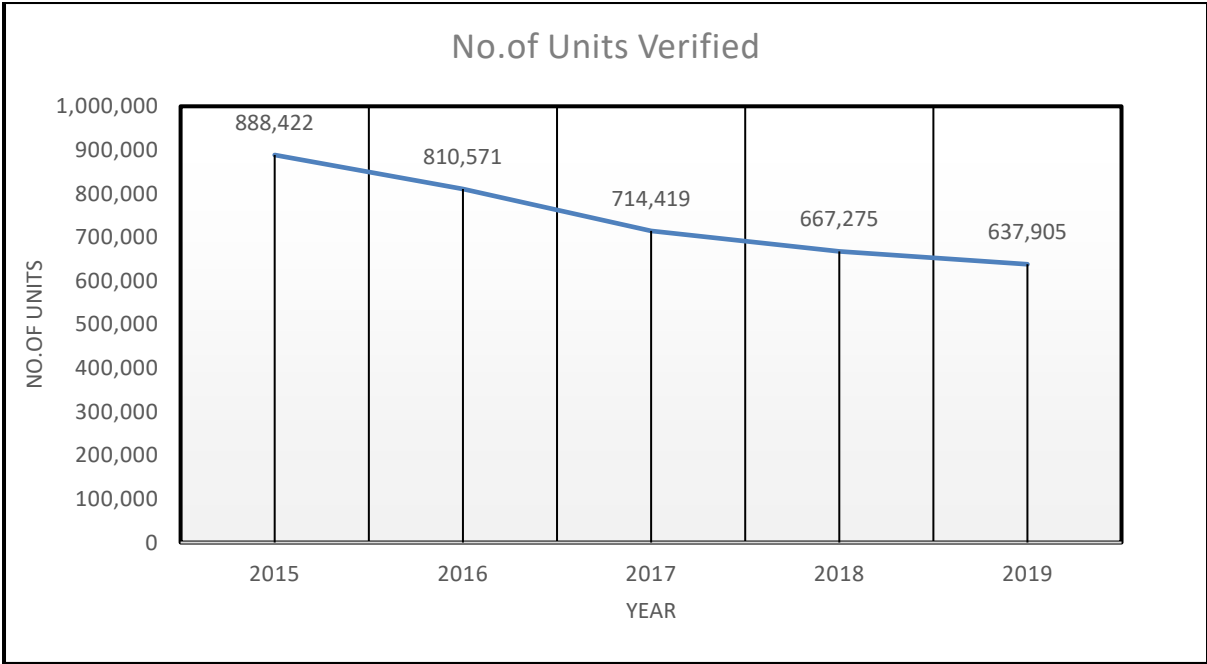
District	Verification Fees 2015 to 2019 (Inclusive All Taxes)				
	2015	2016	2017	2018	2019
Colombo	86,693,931	130,712,937	136,014,517	146,275,819	127,179,235
Gampaha	16,271,296	27,545,201	29,347,519	28,316,491	34,412,047
Kalutara	7,978,818	11,474,642	12,673,950	12,854,085	12,620,705
	110,944,045	169,732,780	178,035,986	187,446,395	174,211,987
Kandy	14,012,409	21,620,097	25,313,869	26,151,103	23,641,359
Matale	4,520,843	7,988,421	8,717,368	9,116,889	9,473,165
Nuwara Eliya	5,587,098	8,584,030	9,725,814	9,841,753	9,887,585
	24,120,350	38,192,548	43,757,051	45,109,745	43,002,109
Galle	7,699,509	10,977,361	12,694,011	13,450,025	13,381,149
Matara	6,693,814	10,280,441	11,735,600	13,838,950	14,952,426
Hambantota	5,129,383	10,119,069	11,955,389	11,618,500	11,789,594
	19,522,706	31,376,871	36,385,000	38,907,475	40,123,169
Batticaloa	3,205,015	5,625,221	6,508,574	6,866,995	7,349,419
Ampara	5,006,882	7,769,257	9,731,150	9,549,772	10,685,340
Trincomalee	1,991,689	3,789,316	3,640,751	4,311,200	4,592,066
	10,203,586	17,183,794	19,880,475	20,727,967	22,626,825
Kununegala	13,817,069	23,779,336	23,919,321	24,484,601	26,364,714
Puttalama	5,743,748	9,201,545	10,322,464	10,535,156	11,132,618
	19,560,817	32,980,881	34,241,785	35,019,757	37,497,332
Anuradhapura	8,992,501	14,846,516	16,459,826	16,642,244	17,683,107
Polonnaruwa	4,717,437	8,266,819	7,563,883	8,005,081	8,544,581
	13,709,938	23,113,335	24,023,709	24,647,325	26,227,688
Badulla	8,148,777	11,924,573	14,580,367	14,739,389	14,043,946
Monaragala	4,638,176	8,090,344	7,966,717	8,570,731	9,537,103
	12,786,953	20,014,917	22,547,084	23,310,120	23,581,049
Ratnapura	8,539,852	12,504,982	13,974,267	15,362,254	14,960,407
Kegalle	7,355,280	10,555,329	9,582,340	10,847,639	10,764,575
	15,895,132	23,060,311	23,556,607	26,209,893	25,724,982
Mullativu	408,207	734,486	835,337	877,496	904,173
Mannar	370,549	667,173	835,717	849,815	991,802
Kilinochchi	461,692	982,477	1,023,661	1,140,455	1,196,932
Jaffna	2,778,039	5,033,464	5,627,755	6,014,086	7,171,783
Vavuniya	1,317,567	2,201,828	2,314,271	2,480,895	2,969,594
	5,336,054	9,619,428	10,636,741	11,362,747	13,234,284
Total	232,079,581	365,274,865	393,064,438	412,741,424	406,229,425

2.9 Number of units verified on district basis

District	Number of Units Verified from 2015 to 2019				
	2015	2016	2017	2018	2019
Colombo	177,201	167,897	129,812	129,481	121,945
Gampaha	46,671	39,706	36,022	33,278	38,542
Kalutara	29,762	27,201	26,900	23,129	22,984
	253,634	234,804	192,734	185,888	183,471
Kandy	76,426	71,353	61,791	63,067	55,528
Matale	24,362	23,383	20,920	19,984	18,809
Nuwara Eliya	25,333	22,165	18,149	18,044	18,927
	126,121	116,901	100,860	101,095	93,264
Galle	37,758	34,061	25,127	29,637	30,162
Matara	33,401	30,289	28,275	28,695	26,090
Hambantota	27,902	26,954	25,477	23,290	21,616
	99,061	91,304	78,879	81,622	77,868
Batticaloa	27,639	29,510	28,680	27,978	28,762
Ampara	32,722	29,614	28,075	23,991	15,076
Trincomalee	12,285	12,037	10,535	10,120	15,033
	72,646	71,161	67,290	62,089	58,871
Kununegala	68,842	61,949	52,315	45,699	45,846
Puttalama	26,420	22,071	18,703	16,989	15,729
	95,262	84,020	70,388	62,688	61,575
Anuradhapura	35,569	32,028	36,554	28,740	28,470
Polonnaruwa	18,467	16,288	13,886	12,478	13,767
	54,036	48,316	50,440	41,218	42,237
Badulla	31,823	30,292	29,162	26,821	24,075
Monaragala	31,434	29,699	27,420	24,816	29,277
	63,257	59,991	56,582	51,637	48,352
Ratnapura	53,708	38,470	35,679	31,393	26,919
Kegalle	38,255	36,454	32,268	25,725	20,953
	91,963	74,924	67,947	57,118	47,872
Mullativu	2,401	2,098	2,216	1,846	1,021
Mannar	1,372	1,399	1,706	1,781	2,158
Kilinochchi	3,022	2,918	2,338	2,210	3,791
Jaffna	21,792	18,486	18,604	14,060	11,047
Vavuniya	3,855	4,249	4,435	4,023	6,378
	32,442	29,150	29,299	23,920	24,395
Total	888,422	810,571	714,419	667,275	637,905



Graph - 01



Graph - 02

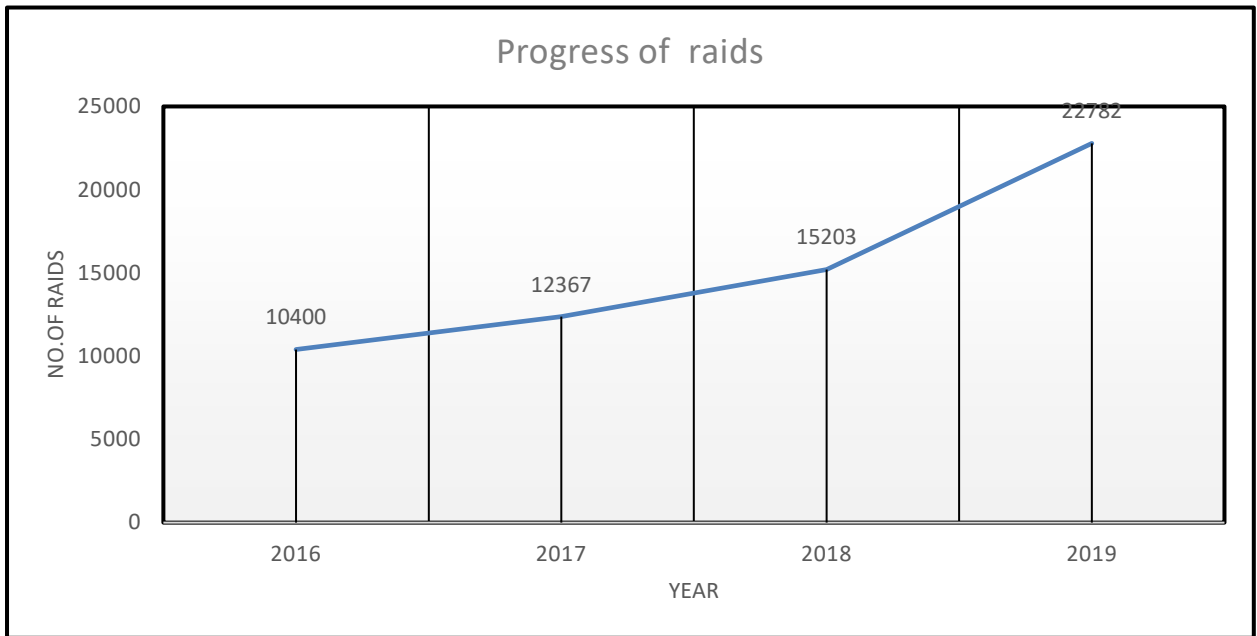
2.10 Verification programme Income in 2019

Month	Income in Rupees		Number of Units Verified	
	Year 2018	Year 2019	Year 2018	Year 2019
January	28,353,563.00	33,051,764.00	67,238	64,992
February	29,319,474.00	37,700,852.00	60,652	61,242
March	33,556,960.00	36,425,057.00	72,898	65,382
April	22,871,425.00	22,870,266.00	40,866	37,172
May	30,345,307.00	33,950,549.00	52,046	52,882
June	27,055,476.00	39,289,906.00	52,916	55,740
July	35,191,518.00	43,433,619.00	53,569	58,567
August	31,057,745.00	29,071,172.00	57,998	52,695
September	31,814,202.00	33,617,458.00	58,187	51,712
October	32,066,562.00	37,618,252.00	58,409	55,681
November	28,213,454.00	30,959,795.00	52,635	45,149
December	29,059,908.00	28,240,735.00	39,861	36,822
Total	*358,905,594.00	406,229,425.00	667,275	637,905

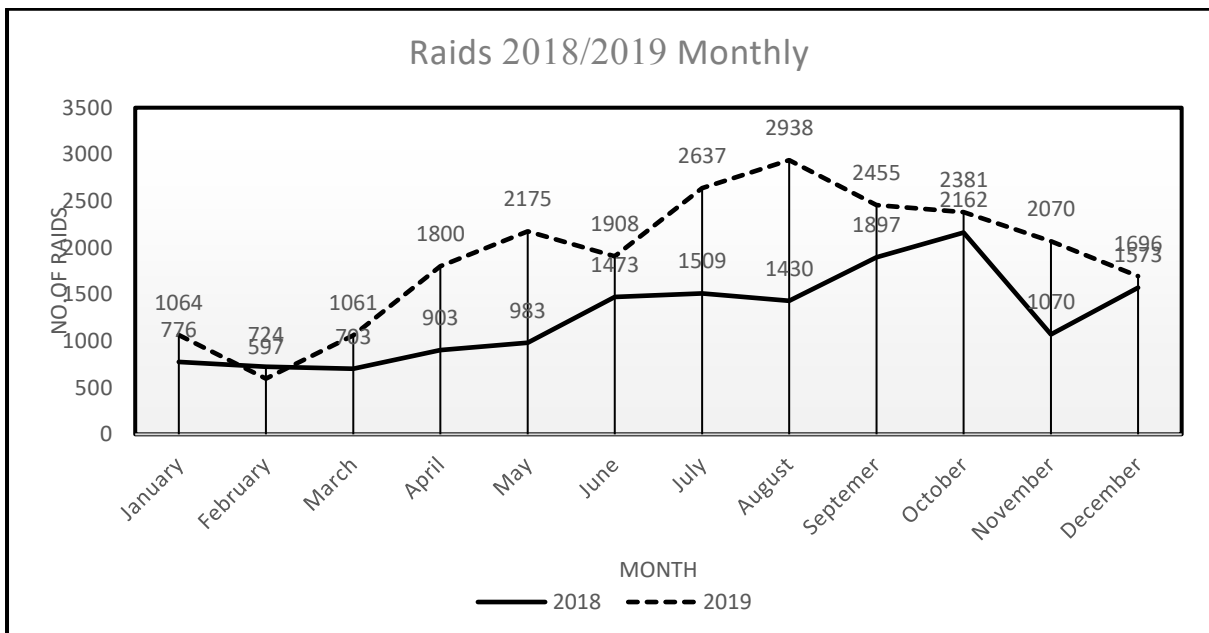
*Income in without Vat

2.11 Raids, Cases and Fines Income

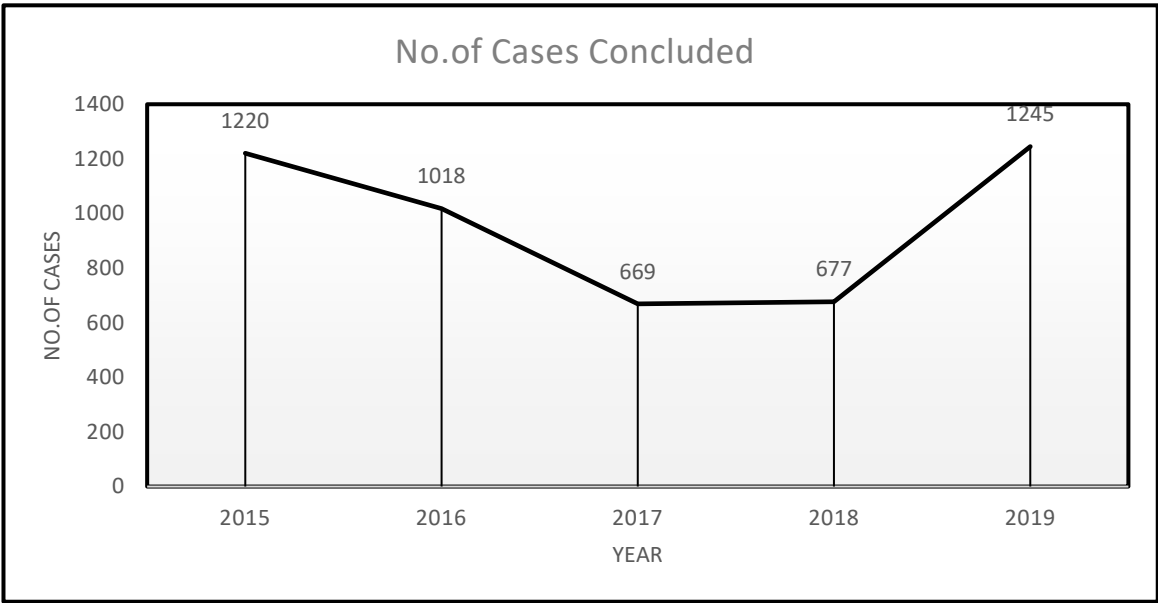
Month	Number of Raids		Number of Cases Concluded		Fines in Rupees	
	2018	2019	2018	2019	2018	2019
January	776	1,064	52	325	4,000.00	254,500.00
February	724	597	31	143	84,500.00	387,700.00
March	703	1,061	53	37	102,000.00	52,000.00
April	903	1,800	43	70	42,000.00	212,000.00
May	983	2,175	42	116	121,500.00	318,000.00
June	1,473	1,908	47	99	115,500.00	223,900.00
July	1,509	2,637	70	61	151,000.00	134,000.00
August	1,430	2,938	50	89	119,250.00	278,000.00
September	1,897	2,455	66	75	131,500.00	396,500.00
October	2,162	2,381	120	101	224,500.00	274,000.00
November	1,070	2,070	75	101	137,000.00	255,750.00
December	1,573	1,696	28	28	68,000.00	69,000.00
Total	15,203	22,782	677	1,245	1,212,500.00	2,855,350.00



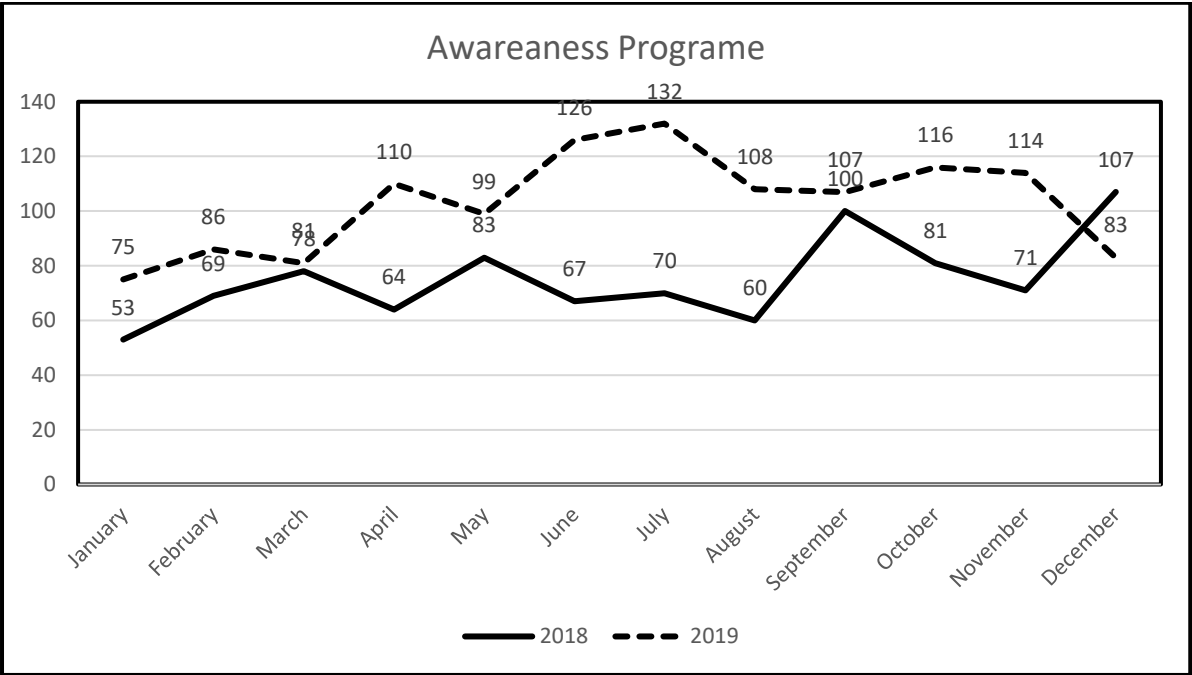
Graph - 03



Graph - 04



Graph - 05



Graph - 06

2.12 Number of Awareness Programmes Conducted 2019

District	Jan	Feb	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
HQ Colombo	0	3	2	2	3	8	6	0	0	0	0	0	24
Colombo	4	10	5	4	7	9	16	29	7	7	10	15	123
Gampaha	5	6	10	7	6	3	4	6	5	5	8	3	68
Kalutara	2	3	3	2	2	2	2	0	3	3	3	2	27
Puttalam	0	2	0	7	5	3	6	0	2	2	4	5	36
Kurunegala	8	10	11	4	10	11	9	10	8	8	8	0	105
Kegalle	2	2	3	3	4	4	4	4	5	5	4	4	44
Ratnapura	4	3	1	5	5	9	5	4	0	3	3	2	44
Galle	0	2	2	12	1	2	7	3	1	1	2	0	33
Matara	4	4	3	4	5	5	3	5	5	5	6	5	54
Hambantota	3	7	6	6	5	4	16	5	9	0	10	0	71
Monaragala	0	2	0	3	2	3	11	5	3	3	3	2	37

2.13 Number of Awareness Programmes Conducted 2019

District	Jan	Feb	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Badulla	4	1	4	3	2	4	3	2	6	6	6	4	45
Nuwara Eliya	4	1	2	2	2	2	4	4	4	4	5	3	37
Kandy	3	2	1	13	9	18	6	9	9	23	16	10	119
Matale	4	2	3	3	3	3	12	0	3	3	5	5	46
Anuradhapura	3	4	4	2	9	10	9	8	4	4	1	4	62
Polonnaruwa	2	2	1	3	3	4	0	2	3	0	2	3	25
Trincomalee	1	4	5	3	4	6	2	2	6	6	2	2	46
Batticaloa	4	4	5	3	4	6	2	2	6	6	0	2	46
Ampara	2	2	3	3	2	6	0	0	3	3	3	0	24
Vavuniya	1	2	2	1	4	2	2	3	3	0	3	3	26
Jaffna	1	3	2	2	2	2	1	2	2	2	1	2	22
Mullativu	2	2	2	1	1	4	2	2	2	2	1	1	22
Mannar	2	2	0	3	2	1	2	3	3	3	2	2	25
Kilinochchi	2	3	2	2	1	1	0	0	2	3	2	1	17
Total	75	86	78	110	99	126	132	108	116	98	106	83	1195

2.13 Quarterly Progress of Awareness Programmes in 2019

(Target number of programmes and actual number held)

District	January–March		April - June		July - September		October – Dec.	
	Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
HQ Colombo	11	5	11	13	11	6	11	0
Colombo	9	19	9	20	9	52	9	32
Gampaha	11	21	11	16	11	15	11	16
Kalutara	8	8	8	6	8	5	8	8
Puttalama	8	2	9	15	8	8	8	11
Kurunegala	11	29	11	33	11	27	11	16
Kegalle	8	7	9	11	8	13	8	13
Ratnapura	8	8	8	19	9	12	7	5
Galle	8	4	9	15	8	11	8	3
Matara	8	11	8	14	9	13	7	16
Hambantota	8	16	9	15	8	30	8	10
Monaragala	8	2	8	8	8	19	8	8
Badulla	8	9	9	9	8	11	9	16
Nuwara Eliya	8	7	8	6	8	12	7	12
Kandy	10	6	11	40	10	24	11	49
Matale	8	9	8	9	8	15	8	13
Anuradhapura	8	11	9	21	8	21	8	9
Polonnaruwa	7	5	6	10	7	5	6	5
Trincomalee	7	4	7	2	6	0	6	5
Batticaloa	7	13	7	13	6	10	6	10
Ampara	7	7	7	11	6	3	6	3
Vavuniya	4	5	5	7	4	8	4	6
Jaffna	7	6	7	6	8	5	6	5
Mullativu	4	6	4	6	5	6	4	4
Mannar	4	4	4	6	5	8	4	7
Kilinochchi	5	7	4	4	4	3	4	5
Total	200	231	206	335	201	342	193	287

2.14 Distribution of Private Entrepreneurs Engaged in Commercial Activities

District	Number of Registered Persons in Each Category			
	Manufacturers	Importers	Traders	Repairers
Colombo	05	27	43	62
Gampaha	06	06	26	35
Kalutara	03	-	21	21
Galle	01	-	13	13
Matara	01	-	12	08
Hambantota	-	-	06	7
Kandy	01	02	17	28
Nuwara Eliya	-	-	06	03
Matale	01	01	07	03
Badulla	-	01	08	15
Kegalle	01	-	04	07
Ratnapura	-	-	11	05
Kurunegala	-	01	17	17
Anuradhapura	-	-	10	07
Monaragala	01	-	04	05
Vavuniya	-	-	03	01
Jaffna	-	-	05	06
Ampara	-	-	07	02
Batticaloa	-	-	05	02
Polonnaruwa	-	-	04	-
Puttalama	-	-	08	03
Trincomalee	-	-	03	-
Total	20	38	240	250

2.15 Registrations of Private Entrepreneurs Engaged in Commercial Activities

Registration Category	Number of Registered Persons in 2019	Total Registration Fee Rs.
Manufacturers of weighing / measuring instruments	20	64,500.00
Importers of weighing / measuring instruments	250	753,900.00
Sellers of weighing / measuring instruments	38	362,000.00
Repairers of weighing / measuring instruments	240	144,000.00
Total	546	1,306,400.00

(Face value of the stamps is included in the above table)

Chapter 03

Overall Financial Performance for the Year

3.1 Statement of Financial Performance

ACA -F

Statement of Financial Performance for the period ended 31st December 2019

Rs.

Budget 2019	Note	Actual		
		2019	2018	
-	Revenue Receipts	-	5,995,797	
-	Income Tax	1	-	} ACA-1
-	Taxes on Domestic Goods & Services	2	-	
-	Taxes on International Trade	3	-	
-	Non Tax Revenue & Others	4	5,995,797	
-	Total Revenue Receipts (A)		5,995,797	
-	Non Revenue Receipts		135,959,269	
-	Treasury Imprests		123,368,892	ACA-3
-	Deposits		680,010	ACA-4
-	Advance Accounts		6,584,143	AC5/5(a)/5(b)
-	Other Receipts		5,326,224	
-	Total Non Revenue Receipts (B)		135,959,269	
-	Total Revenue Receipts & Non Revenue Receipts C = (A)+(B)		135,959,269	
	Less: Expenditure			
-	Recurrent Expenditure		-	
110,000,000	Wages, Salaries & Other Employment Benefits	5	128,132,107	} ACA-2(ii)
-	Other Goods & Services	6	-	

-	Subsidies, Grants and Transfers	7	-	-	
1,000,000	Interest Payments	8	1,684,293	1,428,804	
-	Other Recurrent Expenditure	9	-	-	
<u>111,000,000</u>	Total Recurrent Expenditure (D)		129,816,400	105,849,946	
	Capital Expenditure				
-	Rehabilitation & Improvement of Capital Assets	10	-	-	} ACA-2(ii)
10,000,000	Acquisition of Capital Assets	11	-	-	
-	Capital Transfers	12	-	-	
-	Acquisition of Financial Assets	13	-	-	
-	Capacity Building	14	-	1,470,804	
-	Other Capital Expenditure	15	-	-	
<u>10,000,000</u>	Total Capital Expenditure (E)		-	1,470,804	
	Main Ledger Expenditure (F)		5,136,336	47,504,250	
	Deposit Payments		115,277	37,119,106	ACA-4
	Advance Payments		5,021,059	10,385,144	ACA-5/5(a)/5(b)
	Total Expenditure G = (D+E+F)		134,952,736	154,825,000	
<u>-</u>	Imprest Balance as at 31st December 2019 H = (C-G)		1,006,533	10,957,693	

3.2 Statement of Financial Position

ACA-P

Statement of Financial Position
As at 31st December 2019

	Note	2019 Rs	Actual 2018 Rs
<u>Non Financial Assets</u>			
Property, Plant & Equipment	ACA-6	1,433,652,021	1,151,891,477
<u>Financial Assets</u>			
Advance Accounts	ACA-5/5(a)	22,114,906	23,677,991
Cash & Cash Equivalents	ACA-3	-	5,080,770
Total Assets		1,455,766,927	1,180,650,238
<u>Net Assets / Equity</u>			
Net Worth to Treasury		(25,485,376)	(23,357,558)
Property, Plant & Equipment Reserve		1,433,652,021	1,151,891,477
Rent and Work Advance Reserve	ACA-5(b)		
<u>Current Liabilities</u>			
Deposits Accounts	ACA-4	47,600,282	47,035,549
Imprest Balance	ACA-3	-	5,080,770
Total Liabilities		1,455,766,927	1,180,650,238

Detail Accounting Statements in ACA format Nos. 1 to 6 presented in pages from 5 to 20 and Notes to accounts presented in pages from 21 to 28 form and integral parts of these Financial Statements. The Financial Statements have been prepared in complying with the Generally Accepted Accounting Principles whereas most appropriate Accounting Policies are used as disclosed in the Notes to the Financial Statements and hereby certify that figures in these Financial Statements, Notes to accounts and other relevant accounts were reconciled with the Treasury Books of Accounts and found to in agreement.



.....

Accounting Officer

Name : S.N.Akuranthilaka

Designation : Director

Accountant

Name : S.P. Kothalawala

3.3 Statement of Cash Flows

ACA-C

Statement of Cash Flows for the Period ended 31st December 2019

	2019 Rs.	Actual 2018 Rs.
<u>Cash Flows from Operating Activities</u>		-
Total Tax Receipts	-	-
Fees, Fines, Penalties and Licenses	-	-
Profit	-	-
Non Revenue Receipts	5,424,460	152,881,199
Revenue Collected from the Other Heads	-	-
Imprest Received	123,368,892	-
Total Cash generated from Operations (a)	128,793,352	152,881,199
<u>Less - Cash disbursed for:</u>		
Personal Emoluments & Operating Payments	121,227,297	109,465,127
Subsidies & Transfer Payments	1,684,293	-
Expenditure on Other Heads	1,545,334	-
Imprest Settlement to Treasury	4,553	-
Total Cash disbursed for Operations (b)	124,461,477	109,465,127
NET CASH FLOW FROM OPERATING ACTIVITIES (C)=(a)-(b)	4,331,875	43,416,072
<u>Cash Flows from Investing Activities</u>		
Interest	-	-
Dividends	-	-
Divestiture Proceeds & Sale of Physical Assets	-	-
Recoveries from On Lending	-	-
Recoveries from Advance	-	-

Total Cash generated from Investing Activities (d)	-	-
<u>Less - Cash disbursed for:</u>		
Purchase or Construction of Physical Assets & Acquisition of Other Investment	-	1,470,603
Advance Payments	4,257,175	-
Total Cash disbursed for Investing Activities (e)	4,257,175	1,470,603
NET CASH FLOW FROM INVESTING ACTIVITIES (F)=(d)-(e)	(4,257,175)	(1,470,603)
NET CASH FLOWS FROM OPERATING & INVESTMENT ACTIVITIES (g)=(c) + (f)	74,700	41,945,469
<u>Cash Flows from Financing Activities</u>		
Local Borrowings	-	-
Foreign Borrowings	-	-
Grants Received	-	-
Deposit Received		834,874
Total Cash generated from Financing Activities (h)	-	834,874
<u>Less - Cash disbursed for:</u>		
Repayment of Local Borrowings	-	-
Repayment of Foreign Borrowings	-	-
Deposit Payments	74,700	37,119,106
Total Cash disbursed for Financing Activities (i)	74,700	37,119,106
NET CASH FLOW FROM FINANCING ACTIVITIES (J)=(h)-(i)	(74,700)	(36,284,232)
Net Movement in Cash (k) = (g) -(j)	-	5,080,770
Opening Cash Balance as at 01st January		-
Closing Cash Balance as at 31st December	-	5,080,770

3.4 Performance of the Revenue Collection

Rs. ,000

Revenue Code	Description of the Revenue Code	Revenue Estimate		Collected Revenue	
		Original	Final	Amount (Rs.)	as a % of Final Revenue Estimate
	-No-				

3.5 Performance of the Utilization of Allocation

Statement of Expenditure for the period ended 31st December 2019

Department: Department of Measurement Units Standard and Services

Expenditure Head No :298

Expenditure Code	Provisions					Expenditure			Net Effect			Rs.
	Finance Code	Annual Budgetary Provision	Supplementary Estimate Provision	FR 66/69 Transfers	Total Net Provision	Expenditure as per the Cash Book	Expenditure incurred by Other Ministry/Dept.	Total Expenditure	Savings / Excess	Savings / Excess as a % of Revised Estimate	Reasons for the Variance	
		(1)	(2)	(3) (-)/+	(4)=(1)+(2)+(3)	(5)	(6)	(7)= (5)+(6)	(8)=(4)-(7)	(9)=(8)/(4)*100		
<u>Recurrent Expenditure</u> <u>Programme (1)</u> NOTE - 5 <u>Personal Emoluments</u>												
1001 Salaries & Wages	11	85,000,000	11,467,000	-	96,467,000	94,847,600	-	94,847,600	1,619,400	2		
1003 Other Allowances	11	25,000,000	9,682,000	(750,000)	33,932,000	33,284,507	-	33,284,507	647,493	2		
Total		110,000,000	21,149,000	(750,000)	130,399,000	128,132,107	-	128,132,107	2,266,893	2		
NOTE - 8 <u>Transfers</u>												
1506 Property Loan Interest to Public Servants	11	1,000,000	-	750,000	1,750,000	1,684,293	-	1,684,293	65,707	4		

Total		111,000,000	21,149,000	-	132,149,000	129,816,400	-	129,816,400	2,332,600	2	
<u>Programme (1)</u>											
<u>Capital Expenditure</u> <u>NOTE - 11</u>											
2103 Plant, Machinery & Equipment	11	10,000,000	-	-	10,000,000	-	-	-	10,000,000	100	This provision had been allocated for purchasing scientific Equipments to the NML. All procurement activities are completed and awarded the tender on November. But those equipments had not been received to the Department till 31 st December 2019.
Total Expenditure on Public Investments		10,000,000	-	-	10,000,000	-	-	-	10,000,000	100	
Grand Total - Total Expenditure		121,000,000	21,149,000	-	142,149,000	129,816,400	-	129,816,400	12,332,600	9	

3.6 In terms of F.R.208 grant of allocations for expenditure to this Department/District Secretariat/Provincial Council as an agent of the other Ministries/ Departments

Serial No.	Allocation Received from Which Ministry /Department	Purpose of the Allocation	Allocation		Actual Expenditure	Allocation Utilization as a % of Final Allocation
			Original	Final		
		-No-				

3.7 Performance of the Reporting of Non-Financial Assets

Assets Code	Code Description	Balance as per Board of Survey Report as at 31.12.2019	Balance as per financial Position Report as at 31.12.2019	Yet to be Accounted	Reporting Progress as a %
9151	Building and Structures	777,534,198	777,534,198	-	-
9152	Machinery and Equipment	305,642,823	305,642,823	-	-
9153	Land	350,475,000	350,475,000	-	-
9154	Intangible assets	-			
9155	Biological assets	-			
9160	Work in progress	-			
9180	Leased assets	-			

Chapter 04

Performance Indicators



4.1 Performance indicators of the Institute (Based on the Action Plan)



Specific Indicators	Actual output as a percentage (%) of the expected output		
	100% - 90%	75% - 89%	50% -74%
Number of units verified	100%		
Verification income	100%		
Number of units of Calibrated		80 %	
Calibration income	100%		
Number of training program	100%		
Training income	100%		
Number of units pattern approved	100%		
Pattern approval income	100%		
Number of registered persons	91%		
Registration income	100%		
Units of Prepack	100%		
Prepack income	99%		
Units of raids	100%		
Number of awareness programs	100%		

Chapter 05

Performance of the achieving
Sustainable Development Goals
(SDG)

5.1 Indicate the Identified respective Sustainable Developments Goals

Goals / Objective	Goals	Success Indicators	Progress of the Achievement to date		
			0%-49%	50%-74%	75%-100%
<p>Goal 01 - No Poverty</p> 	<p>Making trade fairer, even in the smallest markets, will ensure that all farmers receive the correct payment for their produce.</p> <p>Ensuring that governments are able to collect accurate taxes on exports, not just the price paid by accurate measurements</p> <p>The control of prepacked goods will also help to reduce fraud in this increasingly important area which often concerns staple foodstuffs.</p>	<p>Number of targeted verified units during the year</p> <p>How many pre-packaging items are expected to be monitored during the year</p>			<p>100%</p> <p>99%</p> <p>100%</p>
<p>Goal 03</p>  <p>Good Health and well being</p>	<p>Improvements in the quality of healthcare for the patient,</p> <p>Reduction in “false positive” and “false negative: test results,</p> <p>Reduction in costs for governments and healthcare insurers and an improvement in the efficiency of health care,</p> <p>Reduction in the numbers of repeat tests due to improvements in quality,</p> <p>Reduction of costs for the in vitro diagnostic (IVD) in quality,</p>	<p>The number of units expected to verify the equipment related to the health sector during the year</p>			<p>100%</p>

<p>Goals 07</p>  <p>Affordable and clean Energy</p>	<p>Metrology play critical role to control the CO₂ and other negative emissions to the environment.</p>	<p>How many Smock meter verified during the year</p>			<p>80%</p>
<p>Goal 09</p>  <p>Industry innovation and Infrastructure</p>	<p>Meet regulatory requirements, document standards and specifications that ensure quality in the manufacture of parts and finished goods.</p> <p>consumer and industrial quality expectations are met, including product value/price and reliability.</p> <p>typically through the use of the CIPM MRA and for commercial laboratories, accreditation, leading to measurement and test results that are internationally recognized and accepted, thus avoiding trade barriers through repeat tests</p>	<p>How many Calibration during the year</p> <p>Measures taken to meet the targeted CIMP MRA requirements during the year.</p>			<p>100%</p>

Chapter 06

Human Resource Profile

6.1 Cadre Management

The cadre composition – 2019.12.31

Position	Salary Scale	Service Category	Class	Approved Cadre	Actual Cadre			Vacancies
					Permanent	Casual	Acting	
Senior Level								
Director MUSS	SL-1-2016	SLSS	I	01	01	-		
Deputy Director / Assistant Director MUSS	SL-1-2016	SLSS	III/II	15	08	-	-	07
Assistant Director MUSS (Admin)	SL-1-2016	SLAS	III	01	-	-	01	01
Accountant	SL-1-2016	SLACS	II/I , II/II	01	01	-	-	-
Accountant (Internal Auditor)	SL-1-2016	SLACS	II/I , II/II	01	-	01	-	01
Tertiary Level								
Administrative Officer	MN-7-2016	Public Management Assistant Service	Special	01	-	-	01	01
Assistant Superintendent of MUSSD	MN-7-2016	Departmental		4	-	-	01	04
Metrology Experimental Officer	MN-7-2016	Technical Service (Supra)	Special	25	05	-	-	20

Position	Salary Scale	Service Category	Class	Approved Cadre	Actual Cadre			Vacancies
					Permanent	Casual	Acting	
Secondary Level								
Information & Communication Technology Officer	MN-6-2016	IT Service		01	01	-	-	-
Metrology Experiment Officer	MN-4-2016	Departmental		36	13	-	-	23
District Metrology Investigation Assistant	MN-4-2016	Departmental		03	03	-	-	-
Development Officer (With Graduate Trainee)	MN-4-2016	Development Service		60	50	-	-	10
Librarian	MN-3-2016	Librarian Services		01	-	-	-	01
MSD Inspector	MN-3-2016	Technical Service	III/II/I	91	89	-	-	2
Lab Assistant	MN-3-2016	Departmental		04	02	-	-	02
Management Services Officer	MN-2-2016	Public Management Assistant Service		20	20	-	-	

Position	Salary Scale	Service Category	Class	Approved Cadre	Actual Cadre			Vacancies
					Permanent	Casual	Acting	
Primary Level								
Technician	MT3/PL3	Departmental		02	-	-	-	02
Mechanic	PL3-2016	Departmental		02	02	-	-	-
Driver	PL3-2016	Departmental		17	17	-	-	-
MSS Sahayaka	PL2-2016	Departmental		63	58	-	-	05
Lab. Sahayaka	PL2-2016	Departmental		10	07	-	-	03
Lorry Sahayaka	PL1-2016	Departmental		02	02	-	-	-
KSS	PL1-2016	KSS (Combined Services)		05	05	-	-	-
Watcher	PL1-2016	Departmental		01	-	-	-	01
Sanitary Labor	PL1-2016	Departmental		01	-	-	-	01
Total				368	285	01	03	83

06.2 The effect of the shortage or excess in human resources to the performance of the institute.

This department was started as a division of the Department of Internal Trade and initially focused only on trade scales. It gradually expanded to other areas and was established in 1997 as the Department of Measurement, Standards and Services as a single department. The limited space laboratory on Colombo 5 Park Road was maintained amidst various difficulties. Later, a new departmental premises and National Measurement Laboratory Were constructed in the Pitipana area in Homagama at a cost of about Rs. 1400 million and the work of the laboratory commenced in 2016.

As the department is now located in a new building complex, it is imperative to expand the activities of the department and recruit new officers for this purpose. At present the assistant director / deputy director of Sri Lanka Scientific Service (SLSS) Grade II / III has 15 joint approved carder and at present 08 officers are serving.

These officers are responsible for the major fields of scientific metrology, industrial metrology and legal metrology which fall under the main purview of this department. The main role of these officers is to establish and maintain the National Measurement System in accordance with the International System of Measurements. The functions of the scientific service are to establish, maintain and enforce the Measurement Standards and Services Act in accordance with international standards for measurements required for a number of existing and new areas, including health, environment, consumer protection, etc., mainly in the industrial and trade sectors.

In addition to performing the duties related to the administration of the laboratory and basic metrology, the number of posts of assistant directors of the Sri Lanka Scientific Service should be adequately increased to carry out the duties of operational industrial metrology and legal metrology island wide. It is be an essential task with the creation of 64 laboratories in the National Measurement laboratory.

06.3 Human Resource Development

Local Training 2019

No	Name of the Program	No. of staff trained	Duration of the program		Total Investment (Rs'000)		Nature of the Program (Abroad/Local)	Output/Knowledge Gained*
					Local	Foreign		
01	Financial Regulation	35	08.01.2019		₹.10,000.00		Local	Basic knowledge of financial regulation
02	National Audit Act No19 2018	02	28.01.2019	29.01.2019	₹.17,000.00		Local	Basics Knowledge of the National Audit Act
03	Work shop for EB Purpose	44	21.01.2019		Free		Local	Past papers related to office methods and accounting methods
04	Certificate Course in Public Procurement	03	10 Days		₹.45,000.00		Local	Basic knowledge related to procurement
05	Computer Hardware &PC Maintenance	01	29.01.2019	30.01.2019	₹.13,000.00		Local	Basic knowledge
06	Electrician Course	02	25.01.2019 since 06 month only Friday		₹.21,400.00		Local	Knowledge related to many aspects required in electrical work
07	Heavy Metal Analysis in Drinking Water	04	12.02.2019	14.02.2019	Free		Local	Knowledge related to heavy metal analysis in Drinking Water

No	Name of the Program	No. of staff trained	Duration of the program		Total Investment (Rs'000)		Nature of the Program (Abroad/Local)	Output/Knowledge Gained*
					Local	Foreign		
08	Testing & Calibration as per ISO/IEC 17025: 2017	01	2019.02.20	2019.02.22	Free		Local	Knowledge related to ISO / IEC 17025: 2017
09	Establishment Code	40	15.01.2019	-	Rs.10,000.00		Local	Basic knowledge of Establishments Code
10	Bid Evaluation in Public procurement	02	27.03.2019	29.03.2019	Rs.36,000.00		Local	facts of related to bidding in procurement
11	B' Accounts	02	26.03.2019	-	Rs.10,000.00		Local	Facts of relating to Advance B Account
12	Rice Moisture Training /Weigh Bridge Training/ Taxi Meater Training	58	22.03.2019	-	Rs.16,805.00		Local	Basic knowledge
13	Government Pay role System	01	29.05.2019		Rs.18,000.00		Local	payment of salaries and their changes
14	Recruitment procedure	02	00.05.2019	-	Rs.17,000.00		Local	

No	Name of the Program	No. of staff trained	Duration of the program		Total Investment (Rs'000)		Nature of the Program (Abroad/Local)	Output/Knowledge Gained*
					Local	Foreign		
15	Personal File Management	01	12.06.2019	14.06.2019	Rs.18,000.00		Local	Basic knowledge of Personal File Management
16	Workshop on Procurement procedure	01	28.05.2019	-	Rs.8,500.00		Local	Basic knowledge of Procurement procedure
17	Data Base Management	02	03.07.2019	04.07.2019	Rs.26,000.00		Local	knowledge of Data Base Management
18	National Audit Act	200	04.07.2019	-	Rs.74,540.00		Local	Basic knowledge of National Audit Act
19	Web Developing USING php & Programme	01	29.07.2019	31.07.2019	Rs.18,000.00		Local	Basic knowledge Web Developing
20	Human Resources Management	06	26.07.2019 Three month Course	-	Rs.70,000.00		Local	knowledge of Human Resources Management
21	ISO 9001 :2015 Quality System	04	10.09.2019	11.09.2019	Rs.56,327		Local	knowledge of ISO 9001 :2015 Quality System

No	Name of the Program	No. of staff trained	Duration of the program		Total Investment (Rs'000)		Nature of the Program (Abroad/Local)	Output/Knowledge Gained*
					Local	Foreign		
22	Pension Procedure	03	10.09.2019	11.09.2019	Rs.15,000.00		Local	Basic knowledge of Pension Procedure
23	Disabled Persons Communication system	01	09.04.2019	30.10.2019 One day for Week	Free		Local	Basic knowledge of Disabled Persons Communication system
24	ISO/IEC17025:2017	36	25.09.2019	-	Rs.24,218.00		Local	Basic knowledge of ISO/IEC17025:2017
25	Formal Letter Writing	02	23.10.2019	24.10.2019	Rs.36,000.00		Local	knowledge of Formal Letter Writing
26	Crane Operator	04	06.12.2019 10 Days	30.01.2019	Rs.180,000.00		Local	Basic knowledge of Crane Operator
27	Workshop on IT Procurement Management	03	12.12.2019	16.12.2019	Rs.36,000.00		Local	Basic knowledge of IT Procurement Management

Foreign Training

No	Name of the Program	No. of staff trained	Duration of the program		Total Investment (Rs'000)		Nature of the Program (Abroad/Local)	Output/Knowledge Gained*
					Local	Foreign		
01	Kick off Workshop	1	2019.02.25	2019.02.28		-	Foreign	Knowledge regarding Quality Infrastructure
02	Hand carry the Standard Platinum Resistance Thermometer	1	2019.05.27	2019.05.30		US \$ 1485	Foreign	Planning, Coordinating & transportation of the primary standards in sir Lanka (SPRT) to the initial Laboratory (NIM China)
03	2nd SAARC – PTB Best practice in Metrology Law Development	2	2019.06.12	2019.07.13		US \$ 320	Foreign	Develop Legal Metrology Law infrastructure among the SAARC Region
04	APMP Mid year DEC Meeting	2	2019.06.17	2019.06.21		US \$ 2002	Foreign	Sharing & Updating Knowledge among the DEC countries, progress review and planning .
05	PTB –SAARC blended learning course QUISP	1	2019.06.29	2019.07.07		US \$ 320	Foreign	Knowledge regarding Quality Infrastructure.
06	OIML / APLMF Seminar on the OIML Certification System	2	2019.07.15	2019.07.17		US \$ 400	Foreign	Identified & applied some developments to the pattern approval works thought OIML certification system

No	Name of the Program	No. of staff trained	Duration of the program		Total Investment (Rs'000)		Nature of the Program (Abroad/Local)	Output/Knowledge Gained*
					Local	Foreign		
07	Fundamental's of Metrology	1	2019.08.17	2019.08.26		US \$ 320	Foreign	How to do a research on new measurements parameters before provide calibration services
08	Pattern Approval and Verification	2	2019.10.15	2019.10.18		US \$ 400	Foreign	Testing Water meters based on OIML R 49
09	CIML 54 th Meeting	1	2019.10.21	2019.10.25		US \$ 3320	Foreign	Sharing & Updating Knowledge among the OIML countries, progress review and planning .
10	Calibration and testing of Non-Invasive Sphygmometers	2	2019.11.11	2019.11.15		US \$ 480	Foreign	Testing Blood pressure meters according to the OIML Regulation R-16
11	SAARC – PTB preparatory workshop on Inter Laboratory Comparison	2	2019.11.19	2019.11.20		US \$ 480	Foreign	Discussed protocol regarding the volume Inter-comparison Instructions to do the SAARC-PTB inter comparison of glass scales-Protocol and planned activities.

No	Name of the Program	No. of staff trained	Duration of the program		Total Investment (Rs'000)		Nature of the Program (Abroad/Local)	Output/Knowledge Gained*
					Local	Foreign		
12	CABUREK	2	2019.11.12	2019.11.14		US \$ 320	Foreign	Project Management regarding the Measurement Science.
13	APMP 35 th Meeting	3	2019.11.26	2019.12.05		US \$ 14355	Foreign	Discussion about upcoming inter comparison. Update knowledge about the current procedure of TCTF. Discussion about inter comparison, Update knowledge about the current procedure of TCEM.

Chapter 07
Compliance Report

No.	Applicable Requirement	Compliance Status (Complied/Not Complied)	Brief explanation for Non Compliance	Corrective actions proposed to avoid non-compliance in future
1	The following Financial statements/accounts have been submitted on due date			
1.1	Annual financial statements	Complied		
1.2	Advance to public officers account	Complied		
1.3	Trading and Manufacturing Advance Accounts (Commercial Advance Accounts)	Not Complied		
1.4	Stores Advance Accounts	Not Complied		
1.5	Special Advance Accounts	Not Complied		
1.6	Others Measurement units , Standards & Services Fund	Complied		
2	Maintenance of books and registers (FR445)/			
2.1	Fixed assets register has been maintained and update in terms of Public Administration Circular 267/2018	Complied		
2.2	Personal emoluments register/ Personal emoluments cards has been maintained and update	Complied		
2.3	Register of Audit queries has been maintained and update	Complied		
2.4	Register of Internal Audit reports has been maintained and update	Complied		

2.5	All the monthly account summaries (CIGAS) are prepared and submitted to the Treasury on due date	Complied		
2.6	Register for cheques and money orders has been maintained and update	Complied		
2.7	Inventory register has been maintained and update	Complied		
2.8	Stocks Register has been maintained and update	Complied		
2.9	Register of Losses has been maintained and update	Complied		
2.10	Commitment Register has been maintained and update	Not Complied	Does not maintain document due to lack of liabilities	
2.11	Register of Counterfoil Books (GA – N20) has been maintained and update	Complied		
03	Delegation of functions for financial control (FR 135)			
3.1	The financial authority has been delegated within the institute	Complied		
3.2	The delegation of financial authority has been communicated within the institute	Complied		
3.3	The authority has been delegated in such manner so as to pass each transaction through two or more officers	Complied		
3.4	The controls has been adhered to by the Accountants in terms of State Account Circular 171/2004 dated 11.05.2014 in using the Government Payroll Software Package	Complied		
4	Preparation of Annual Plans			
4.1	The annual action plan has been prepared	Complied		
4.2	The annual procurement plan has been prepared	Complied		

4.3	The annual Internal Audit plan has been prepared	Complied		
4.4	The annual estimate has been prepared and submitted to the NBD on due date	Complied		
4.5	The annual cash flow has been submitted to the Treasury Operations Department on time	Complied		
5	Audit queries			
5.1	All the audit queries has been replied within the specified time by the Auditor General	Complied		
6	Internal Audit			
6.1	The internal audit plan has been prepared at the beginning of the year after consulting the Auditor General in terms of Financial Regulation 134(2)) DMA/1-2019	Complied		
6.2	All the internal audit reports has been replied within one month	Not Complied	Presently answers are confirming.	Officers were informed to reply within the relevant period in future.
6.3	Copies of all the internal audit reports has been submitted to the Management Audit Department in terms of Sub-section 40(4) of the National Audit Act No. 19 of 2018	Not Complied	Effective from 2020.	Internal Audit Division was established in 2019
6.4	All the copies of internal audit reports has been submitted to the Auditor General in terms of Financial Regulation 134(3)	Not Complied	Effective from 2020.	Internal Audit Division was established in 2019
7	Audit and Management Committee			
7.1	Minimum 04 meetings of the Audit and Management Committee has been held during the year as per the DMA Circular 1-2019	Not Complied	Planed to held from the year 2020.	Internal Audit Division was established in 2019
8	Asset Management			

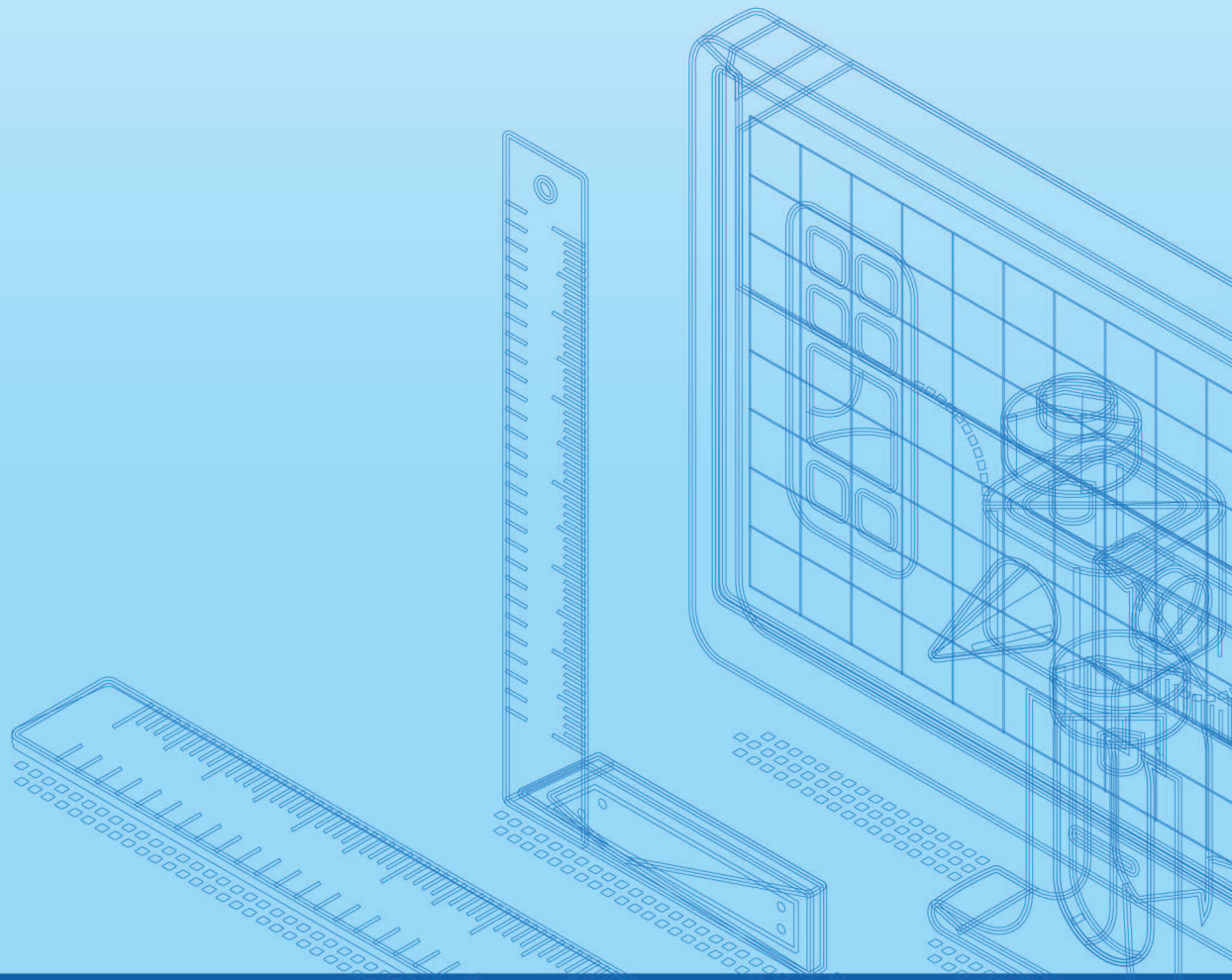
8.1	The information about purchases of assets and disposals was submitted to the Comptroller General's Office in terms of Paragraph 07 of the Asset Management Circular No. 01/2017	Complied		
8.2	A suitable liaison officer was appointed to coordinate the implementation of the provisions of 13the circular and the details of the nominated officer was sent to the Comptroller General's Office in terms of Paragraph 13 of the aforesaid circular	Not Complied	No officer has been appointed.	Appoint an officer and report to the Comptroller General's Office
8.3	The boards of survey was conducted and the relevant reports submitted to the Auditor General on due date in terms of Public Finance Circular No. 05/2016	Not Complied	Completion of Goods Survey on 31/12/2019 before 31/08/2020	Carrying out survey of goods and submitting reports on due date from the year 2020.
8.4	The excesses and deficits that were disclosed through the board of survey and other relating recommendations, actions were carried out during the period specified in the circular	Not Complied		Appointing a committee for this purpose and obtaining reports on excess deficiencies
8.5	The disposal of condemn articles had been carried out in terms of FR 772	No		
9	Vehicle Management			
9.1	The daily running charts and monthly summaries of the pool vehicles had been prepared and submitted to the Auditor General on due date.	Complied		
9.2	The condemned vehicles had been disposed of within a period of less than 6 months after condemning	Not Complied	No decision has been made.	
9.3	The vehicle logbooks had been maintained and updated	Complied		
9.4	The action has been taken in terms of F.R. 103, 104, 109 and 110 with regard to every vehicle accident			
9.5	The fuel consumption of vehicles has been re-tested in terms of the provisions of Paragraph 3.1 of the Public Administration Circular No. 30/2016 of 29.12.2016	Not Complied	Implemented from 2020	

9.6	The absolute ownership of the leased vehicle log books has been transferred after the lease term	Complied		
10	Management of Bank Accounts			
10.1	The bank reconciliation statements had been prepared, got certified and made ready for audit by the due date	Complied		
10.2	The dormant accounts that had existed in the year under review or since previous years settled	No		
10.3	The action had been taken in terms of Financial Regulations regarding balances that had been disclosed through bank reconciliation statements and for which adjustments had to be made, and had those balances been settled within one month	Complied		
11	Utilization of Provisions			
11.1	The provisions allocated had been spent without exceeding the limit.	Complied		
11.2	The liabilities not exceeding the provisions that remained at the end of the year as per the FR 94(1)	Not Complied		
12	Advances to Public Officers Account			
12.1	The limits had been complied with	Complied		
12.2	A time analysis had been carried out on the loans in arrears	Complied		
12.3	The loan balances in arrears for over one year had been settled	Not Complied	Failure to recover the loan balances of two officers who left the service	The Attorney General has been informed. Taking further action to recover the debt balances of the relevant officers
13	General Deposit Account			
13.1	The action had been taken as per F.R.571 in relation to disposal of lapsed deposits	Not Complied	No deposit account balance	
13.2	The control register for general deposits had been updated and maintained	Not Complied	No deposit account balance	

14	Imprest Account			
14.1	The balance in the cash book at the end of the year under review remitted to TOD	Complied		
14.2	The ad-hoc sub imprests issued as per F.R. 371 settled within one month from the completion of the task	Complied		
14.3	The ad-hoc sub imprests had not been issued exceeding the limit approved as per F.R. 371	Complied		
14.4	The balance of the imprest account had been reconciled with the Treasury books monthly	Complied		
15	Revenue Account			
15.1	The refunds from the revenue had been made in terms of the regulations	Not relevant		
15.2	The revenue collection had been directly credited to the revenue account without credited to the deposit account	Not relevant		
15.3	Returns of arrears of revenue forward to the Auditor General in terms of FR 176	Not relevant		
16	Human Resource Management			
16.1	The staff had been paid within the approved cadre	Complied		
16.2	All members of the staff have been issued a duty list in writing	Not Complied	Duties assigned to District Development Officers are not specified	Taking action to delegate duties in writing from 2020
16.3	All reports have been submitted to MSD in terms of their circular no.04/2017 dated 20.09.2017			
17	Provision of information to the public			
17.1	An information officer has been appointed and a proper register of information is maintained and updated in terms of Right To Information Act and Regulation	Complied		

17.2	Information about the institution to the public have been provided by Website or alternative measures and has it been facilitated to appreciate / allegation to public against the public authority by this website or alternative measures	Complied		
17.3	Bi- Annual and Annual reports have been submitted as per section 08 and 10 of the RTI Act	Complied		
18	Implementing citizens charter			
18.1	A citizens charter/ Citizens client's charter has been formulated and implemented by the Institution in terms of the circular number 05/2008 and 05/2018(1) of Ministry of Public Administration and Management	Not Complied		In the process
18.2	A methodology has been devised by the Institution in order to monitor and assess the formulation and the implementation of Citizens Charter / Citizens client's charter as per paragraph 2.3 of the circular	Not Complied		
19	Preparation of the Human Resource Plan			
19.1	A human resource plan has been prepared in terms of the format in Annexure 02 of Public Administration Circular No.02/2018 dated 24.01.2018.	Complied		
19.2	A minimum training opportunity of not less than 12 hours per year for each member of the staff has been ensured in the aforesaid Human Resource Plan	Complied		
19.3	Annual performance agreements have been signed for the entire staff based on the format in Annexure 01 of the aforesaid Circular	Not Complied	Senior Officer Only	According to the circular, it is to be implemented from 2020
19.4	A senior officer was appointed and assigned the responsibility of preparing the human resource development plan, organizing capacity building programs and conducting skill development	Complied		

	programs as per paragraph No.6.5 of the aforesaid Circular			
20	Responses Audit Paras			
20.1	The shortcomings pointed out in the audit paragraphs issued by the Auditor General for the previous years have been rectified	Complied		



මානේනවත්ත, පිටිපන, හෝමාගම
மாஹேனவத்த, பிட்பன, ஹோமாகம
Mahenawatta, Pitipana, Homagama

Tel : 0112182250,51

Fax : 0112182254,69

Email : info@measurementsdept.gov.lk