



ANNUAL REPORT 2004

Promoting Standards and Quality in Guyana

Guyana National Bureau of Standards National Exhibition Centre Sophia Greater Georgetown Guyana

January 2005

GUYANA NATIONAL BUREAU OF STANDARDS (GNBS)

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VISION OF GNBS

To improve the quality of life of the people of Guyana through the process of standardization.

MISSION STATEMENT

To promote standardization and quality systems in the production and importation of goods and services for the protection of the consumer and the advancement of local and foreign trade thereby improving the quality of life of the people of Guyana.

MEMBERS OF NATIONAL STANDADS COUNCIL 2004

1.	Mr. Melvyn Sankies	Chairman	
2.	Dr. Chatterpaul Ramcharran	Member	Guyana National Bureau of Standards.
3.	Mr. Willet Hamilton	Member	Ministry of Tourism, Industry and Commerce.
4.	Mr. Chandi Das Banerji for Mr. Valmikki Singh	Member	National Frequency Management Unit.
5.	Mr. Dhanpaul Dhanraj	Member	Guyana Rice Millers & Exporters Development Association.
6.	Mr. Narvon Persaud	Member	Guyana Association of Professional Engineers.
7.	Dr. Gocool Persaud	Member	Guyana Manufacturers Association.
8.	Mr. Patrick Dyal	Member	Guyana Consumers Association.
9.	Ms. Emilia Maslen	Member	Environmental Protection Agency.
10.	Mr. Leevan DeSantos	Member	Food and Drugs Department.
11.	Mr. Brian Greenidge	Member	Guyana Rice Development Board.
12.	Mr. William Benjamin	Member	Benjamin Business Machines.
13.	Mr. Rameshwar Ramrattan	Member	Georgetown Chamber of Commerce and Industry.
14.	Mr. Naresh Singh	Member	Guyana Oil Company.

EXECUTIVE OFFICERS

(Management Team)

Dr. Chatterpaul Ramcharran - Director

Mr. Jowala Somai - Head, Management Systems Department

Ms. Evadnie Enniss-Fields - Head, Information Services Department.

Ms. Charmain Niles - Head, Administration and Finance

Department (ag.).

Ms. Shune Vickerie - Coordinator, Standardisation Department.

Mr. Shailendra Rai - Chief Inspector, Metrology and Compliance

Department.

DEPARTMENTS/WORK PROGRAMMES

* Metrology & Standards
Compliance Department - Weights & Measures (Legal Metrology)

Standards Compliance monitoring

* Standardisation Department - Standards Development

Standards Promotion

Standards Implementation

Codex activities

* Management Systems Department - Laboratory Certification

Product Certification

Quality & Environmental

Management

Conformity Assessment

* Information Services Department - Communication

Metrication

Standards Information

* Administration and Finance - Administration

Finance

EXECUTIVE SUMMARY

HIGHLIGHTS OF ACHIEVEMENTS FOR 2004

During the year 2004, The Guyana National Bureau of Standards(GNBS) continued to promote standardisation and quality systems in Guyana through some twelve (12) work programmes in order to facilitate local and foreign trade, industrial development and also the protection of consumers. In striving to accomplish these goals, the GNBS made a number of notable achievements, as listed below. There is no doubt that Guyanese are becoming more and more aware of the importance of standards and the benefits that can be acquired through the application of standards.

(1) Mobile Scale testing Truck

The GNBS acquired a mobile scale testing truck complete with hoist, at a cost of three (3) million dollars and ten tonne masses valued 1.9 million dollars, for the testing and verification of large capacity scales used in the sugar, rice, quarrying and other industries and in the Transport and Harbours Department. Since the purchase of the truck, the Bureau successfully verified at least 80% of the bulk scales used in industries countrywide for the year. The acquisition and use of the truck to test the accuracy of bulk scales has significant implications for the export trade.

(2) Electricity Test Bench

The GNBS acquired a six station, single-phase electricity meter test bench to conduct the testing of imported meters to ensure accuracy prior to use. The standard meter of the test bench, which is now in operation, was calibrated by the Jamaica Bureau of Standards, having accuracy and traceability, to the International Standard. Five (5) Senior Inspectors of the GNBS also received training on the use of this equipment.

(3) Scientific Metrology- Calibration activities

A significant achievement of the GNBS during the year was the establishment of a Reference Mass Laboratory which was constructed to house the Primary mass standards, analytical balances and other related equipment under controlled environmental conditions. This laboratory would separate out the scientific calibration activities carried out in the other laboratories. It would be used to perform scientific calibration of secondary standards against the primary standards on a periodic basis and the secondary standards would be used to calibrate the working standards used by other Departments of the GNBS, as well as the ten (10) Administrative Regions of the country. The working standards are being used to test the devices (scales, weights and measures) used in commerce.

The remaining primary standards and metrology equipment for mass, length and volume purchased in 2003 from the 20 million dollars capital budget was received and installed in their respective laboratories during this year.

(4) Legal Metrology/Weights and Measures Activities

The GNBS completed the verification of new, locally-manufactured and imported devices submitted for testing during the year, resulting in a quantity of 940 scales, 1,951 masses, 344 measures and 303 metre rules tested for accuracy. For subsequent verification, 5,722 scales, 11,208 masses, 599 measures and 7 storage tanks were tested for accuracy. At filling stations 1,139 petrol pumps, and 5 bulk meters were calibrated. Inspectors also conducted surveillance activities and visited 3,221 stalls at Municipal markets and 3,046 premises countrywide, to ensure that all weighing and measuring devices used in commercial trade were tested and stamped. This service of the GNBS is pivotal in providing consumer protection and equity in trade. It ensures that all devices used in official and legal business activities are accurate and are in an acceptable working condition.

(5) Rice Certification

During the year, the GNBS maintained its certification programme of rice exported to Jamaica, in keeping with the request of the Jamaican Authorities. GNBS certified the percentage broken content of white and parboiled rice bound for that country. A total of 106,128 metric tonnes or 1,425 containers of white and parboiled rice were sampled, tested, and certified for 10 exporters. The Jamaican Authorities are satisfied with the quality of rice received from Guyana, as certified by the GNBS.

(6) International Certification of Eight Companies – ISO 9001 Project

The GNBS, in collaboration with the Caribbean Programme for Economic Competitiveness (CPEC), has advanced the joint project to the final phase for eight companies that are seeking certification to the ISO 9001 Quality Management Standard.

These companies have to date completed the documentation of their quality management system and have commenced the implementation process with the next step being the registration of these companies to the ISO 9001 standard. Some of them are already benefiting from improved production efficiencies and increased market access, hence making them more competitive in a global marketplace.

Attaining ISO certification will enable local companies to enter and compete in overseas markets as they would have satisfied the requirements of an internationally accepted standard. They will also be able to increase foreign exchange.

(7) Jewellery Sector

The operations of the gold jewellery sector were enhanced as GNBS intensified its efforts to sensitise and educate goldsmiths and jewellers on the importance of complying with the national standards for gold articles. Six (6) workshops outlining the (1) fire assay test method for gold purity, (2) methodology for alloying gold and (3) marking requirements for gold jewellery were conducted in Demerara, Berbice and Essequibo. This had resulted in two new jewellers (Johnny's Jewellery and Alim's Jewellery) being granted permits to use the national standards mark on their gold articles, bringing the number of certified jewellers to seven (7).

Many of the goldsmiths were very appreciative of the training sessions that were conducted and indicated their interest to join the standards mark scheme. There has also been a corresponding improvement in the quality of gold jewellery sold on the market.

The Bureau of Standards offers gold testing services to goldsmiths and jewellers and members of the public. If a consumer has doubts about the purity of a gold article, it can be independently tested at the GNBS gold testing laboratory. A total of 52 gold samples were tested by the GNBS for purity at the request of consumers and as part of the GNBS certification process.

(8) National Conformity Assessment Programme

The National Committee on Conformity Assessment was established at the start of the year with the responsibility for: "Establishing a National Conformity Assessment system that is internationally recognized and meet the requirements set out in the trade agreements being negotiated by Guyana". This committee met every quarter and agreed on its Terms of reference, priority sectors of focus and the decision making process for issues identified and recommendations made.

Eight(8) Sector Committees of the National Committee (jewellery, construction, meats and seafoods, furniture, tourism, rice, foods and wood) were established and each had several meetings to identify the issues affecting their sectors, developed action plans and some have started the process of implementing these plans so as to ensure that Conformity Assessment activities within the sector are addressed.

It is important that Guyana puts conformity assessment mechanisms in place to provide assurance to the market place that the products meet regional and international trade requirements and to monitor the quality of locally produced goods.

Training sessions of personnel from Public Sector Agencies have commenced on the requirements of the ISO 17020 (Inspection Standard) and ISO 17025 (Testing standard)

and Guide 65 (Certification standard). These Agencies are required to be accredited to the respective standards. Three agencies (GRDB, GNBS, Food and Drug Department) have commenced the preparation and implementation of their quality manuals.

Upon completion of the process, these agencies would meet the criteria to function as internationally-recognised inspection and testing bodies for our local industries.

With respect to 2004, GNBS adjusted its standards development programme to produce only priority needed standards. In the circumstances, fifteen (15) Guyana Standards were produced covering a range of subjects, including, occupational health and safety and carbonated beverages. Standards are developed to enhance the standards compliance programme and to protect consumers from local and foreign goods of poor quality.

(9) Standards Compliance

Under this programme, some twenty- two categories of imported commodities falling under the purview of the GNBS were monitored for compliance to National Standards. It requires that importers of these commodities register with the Bureau, so that inspectors will be able to carry out inspections, to verify quality and ensure that requirements under the import control regulations are met.

As part of the process, GNBS Inspectors conducted product by product surveillance campaigns and examinations at sale outlets based on complaints received and information acquired from shipping manifests. As a result, a total of 102 importers, 58 used-tyre dealers and 3 local manufacturers were registered with the GNBS for the importing, retailing and manufacturing of commodities monitored by the GNBS. There has been an increase in the number of importers registered for 2004 as compared with the two previous years.

A total of 1531 surveillance inspections and 31 ports of entry inspections were conducted for 2004. Resulting from these inspections, a quantity of 27 LPG regulators, 402 packets safety matches, and 153 packets of candles were seized and removed and 226 water pumps were placed on hold. These activities are routinely carried out to ensure that consumers receive value for money and to rid the market place of substandard goods.

(10) Standards Development

With respect to 2004, GNBS adjusted its standards development work programme to produce only priority needed standards. In the circumstances, fifteen (15) Guyana Standards were produced covering a range of subjects, including occupational health and safety and carbonated beverages. Standards are developed to enhance the standards compliance programme and to protect consumers from local and foreign goods of poor quality.

0.0 INTRODUCTION

This report highlights the activities, achievements and the challenges of the various work programmes of the Guyana National Bureau of Standards (GNBS) for the year 2004, including its Branch Office in Region 2 (Anna Regina), Region 6 (New Amsterdam), and the Weights and Measures Offices in the other Regions of the country.

The report is structured and presented under the ten (10) different work programmes of the GNBS with the Administration and Finance Department providing a critical, supporting role to the operations of the said programmes. In discussing the achievements of each work programme, an attempt is made to evaluate the results obtained in the context of the challenges posed by the environment, and also, to make observations or comments on the evaluation, and ultimately, possible recommendations for further actions. This approach would add value to the report, as field experiences from the different activities are reflected in the evaluation conducted.

Standardisation is based fundamentally on the development, promotion, implementation and enforcement of standards which activities are intended to streamline and impact on industries, sectors, or companies. While the GNBS has the mandate to produce the standards needed by the different sectors of the economy through its various Technical Committees, it is the responsibility of the Regulatory or controlling body of each Sector to enforce the standard produced and issued. The success achieved by such Bodies/Agencies in the application and management of the standard is beyond the control of the GNBS.

The GNBS is involved in the promotion and implementation of some standards for products where there is not a Regulatory Body in the country e.g. used tyres, textiles, garments, and footwear, etc. The GNBS also has the responsibility to administer the range of International Management System Standards (ISO standards) for the development of the manufacturing companies. The cooperation and response from the manufacturers, importers and the private sector have largely not been encouraging. Attendance and participation at meetings, seminars, consultations and symposia have not been so positive, as the stakeholders tried to shy away from standards.

The GNBS made significant contributions to other Agencies and Departments with representation at their Boards, Councils or Committee Meetings, thus providing necessary, invaluable information or participating in brain-storming sessions at workshops to design strategic plans or evolve recommendations for actions on particular problems or issues. Technical Officers of the GNBS also made numerous presentations externally for other institutions, in providing support to their operations, particularly in relation to the International Management System Standards. The GNBS, in addition, maintained its inhouse series of seminars for staff, throughout the year, as also, ensured the external training of staff (local and foreign) in its Human Resource Development programme. All these activities are discussed in the Administration and Finance Section of the Report.

It is hoped that the report would make interesting reading while it attempts to address the objectives of the work programmes.

1.0 LEGAL METROLOGY (Weights and Measures)

The main activities undertaken this year under the Weights and Measures Programme include the initial verification of the accuracy of devices manufactured locally and imported, i.e., the testing and stamping of new scales, weights and measures before they are allowed to be used in commerce. Included also, is the subsequent verification of the accuracy of devices at least twice per year, i.e., the testing and stamping of devices already in use in commerce. Important among the activities are the verification of petrol pumps, bulk meters and wagon compartments; calibration of storage tanks; verification of working physical, metrology standards used by the Weights and Measures Offices of the ten (10) Administrative Regions; and surveillance of devices at sale outlets to ensure that they are stamped and are performing satisfactorily. Significantly, local manufacturers were licensed to produce scales, weights and measures, as also, to convert imperial devices to metric.

Further, other activities such as external training for farmers, attending meetings on behalf of the GNBS, and the investigation of complaints relating to the operation of rice mills, which were not included in the work programme for 2004, were conducted based on requests from stakeholders.

1.1 Manufacture of Weighing and Measuring Devices

During the year 2004, six (6) manufacturers were licensed with the GNBS to manufacture scales and masses and to convert devices from imperial to metric units as compared with nine (9) manufacturers of scales and masses for 2003, and eight (8) for 2002. Also, two (2) manufacturers of measures were licensed for 2004 as compared with none for 2003 and one (1) for 2002.

The inspection of registered manufacturers' premises was done at the beginning of the year to ensure compliance with the manufacturing requirements i.e. the facilities and tools used in their operations, quality control techniques, manufacturing standards, test mass and calibration scale, prior to the issuing of manufacturing licences. In addition, quarterly inspections were conducted to ensure that requirements have been maintained.

Based on inspections conducted at manufacturers' premises, it was observed that manufacturers were generally adhering to manufacturing requirements stipulated by the GNBS, except in one situation where a manufacturer did not use bushings on a batch of scales manufactured, as required by the standard. The manufacturer had to take corrective actions to address the nonconformity by installing the required bushings. Generally, devices manufactured locally by licensed manufacturers are submitted to the GNBS for verification prior to sale.

Manufacturers of devices have expressed concerns regarding imported devices that are offered for sale in both metric and imperial units, since it is creating unfair competition as they are required to manufacture only metric devices. As a result, Inspectors of the GNBS carried out surveillance inspections at sale outlets on three occasions. However, most of the devices found were stamped by the GNBS. Devices found to be unstamped were seized and removed for verification. In situations where devices were in both imperial and metric units, the dealers were advised to convert them to metric and submit same to the GNBS for verification.

Devices in dual mode (imperial and metric units) which are sold without being verified by the GNBS could result in consumers being cheated when purchasing products from vendors using such devices. Further, the use of dual mode devices would delay the transformation of the system of measurement from imperial to metric, since vendors would continue to use the imperial units.

1.2 Initial verification of Imported and Locally Manufactured Devices

In figure 1, the bar graph shows the initial verification of devices for the year 2004 in respect of scales, masses, measures and meter rules as compared with 2003.

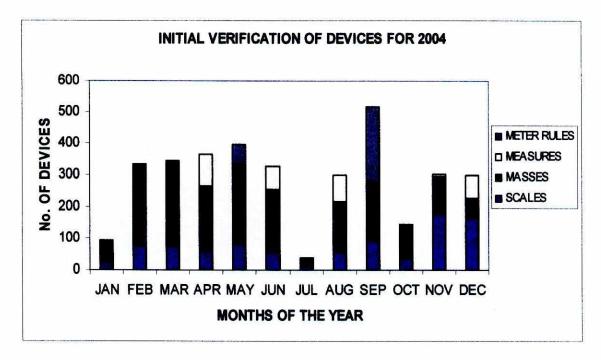
The initial verification of devices involves the inspection of new devices, imported or locally manufactured to ensure compliance with the manufacturing or importation requirements and the testing of same to ensure accuracy.

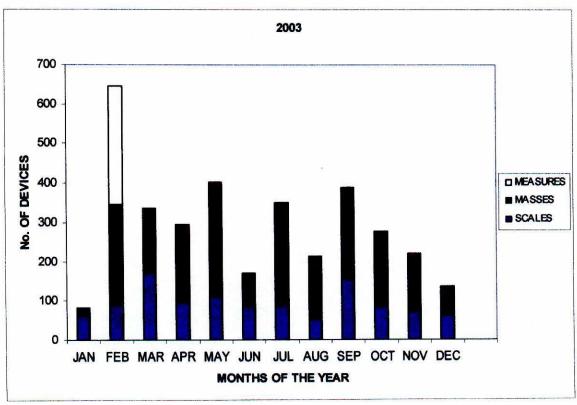
A quantity of 940 scales, 1,951 masses, 344 measures, 303 metre rules, and 506 electricity meters, locally-manufactured and imported, were initially verified by the Bureau for the year 2004, in comparison with 1,128 scales, 2,087 masses, 298 measures and 31 metre rules for 2003, and 1,263 scales, 2,123 masses and 512 measures verified for the year 2002. This indicates a decrease in the number of devices initially verified for the year 2004. A quantity of 55 scales, 82 masses and 64 measures was rejected in 2004, as compared with 14 scales and 52 masses rejected in 2003, and 14 scales and 3 masses rejected in 2002 since they did not pass the tests conducted and met the manufacturing requirements.

Devices rejected were returned to manufacturers for rectification and further adjustments and they were subsequently verified. Nonconformities identified were highlighted to manufacturers at the time of submission of devices for verification to prevent a re-occurrence of such non-conformities. In situations where the devices could not have been rectified, the devices were scrapped and reworked by the manufacturers.

There was a decrease in the number of scales and masses initially verified since the demand for new devices on the market declined. Most of the vendors were already in possession of metric devices. However, those with imperial devices were moving to convert these devices to metric instead of buying new ones.

FIGURE 1





There was an increase in the number of measures and meter rules initially verified due to increased awareness of dealers, vendors and shopkeepers, and surveillance inspections carried out by Inspectors at sale outlets.

There is need for Importers of devices used in commercial trade to be more aware of the requirements for the importation of the said devices and this would be addressed early in the new year. In situations, where practicable, samples of devices should be submitted to the GNBS for type approval prior to importation. Further, imported devices need to be initially verified by the GNBS prior to release for sale. During the up-coming year, the GNBS will intensify surveillance inspections at sale outlets to ensure that devices imported and offered for sale are verified by the GNBS as required. Devices found to be unstamped would be seized and dealers would be prosecuted.

1.3 Testing of electricity meters

The GNBS received a six-station, singe phase electricity meter test bench from the Eldorado Energy and Industrial Development Corporation as a donation to the Government of Guyana, and five Inspectors from the GNBS were trained by Consultants from the said Company to operate the said test bench. As a result, the Bureau was able to commence the verification of electricity meters imported by GPL prior to installation. The GNBS initially verified a total of 728 electricity meters for GPL. This activity is expected to be continuous depending on the importation of meters.

1.4 Subsequent Verification of Devices (scales, masses and measures)

The subsequent verification of devices involves the inspection of devices already in commercial use to ensure that they are in good working condition, and the testing of same to ensure accuracy.

The verification of devices already in commercial use was conducted at the Bureau's Head Office, Sophia Exhibition Site, Regional Weights and Measures offices countrywide, at the Bureau's branch offices in Regions 2 and 6 and also, during mobile stamping exercises conducted at markets and strategic locations in the various Regions. These exercises were conducted during the periods January to March and July to September, for the first and second half of the year, respectively.

In figure 2, the bar graph shows the subsequent verification of devices, for the year 2004 in respect of scales, masses, measures and storage tanks as compared with 2003.

A total of 5,722 scales, 11,208 masses, 599 measures and 7 storage tanks were subsequently verified for the year 2004, in comparison with 4,812 scales, 8,427 masses, 932 measures and 17 fuel tanks verified for 2003, and 3,360 scales, 7,151 masses and 515 measures verified for 2002, indicating a significant increase in the number of devices subsequently verified. This increase is attributed to the comprehensive mobile stamping exercises conducted countrywide and intensive weights and measures surveillance inspections conducted at shops and markets during the corresponding period that resulted in the seizure of all unstamped devices, which were subsequently verified.

Devices verified were mainly used at markets, shops, hospitals, clinics, health centres, post offices, airlines, shipping agencies, fisheries, supermarkets, sugar estates, rice mills and other industries.

1.5 Scale Testing Truck

The GNBS acquired a mobile scale testing truck complete with hoist, at a cost of three (3) million dollars and ten tonnes masses valued 1.9 million dollars for the testing and verification of large capacity scales used in the sugar, rice, quarrying and other industries, and in the Transport and Harbours Department. Since the purchase of the truck, the Bureau successfully verified accuracy of at least 80% of the bulk scales used in industries country-wide for the year.

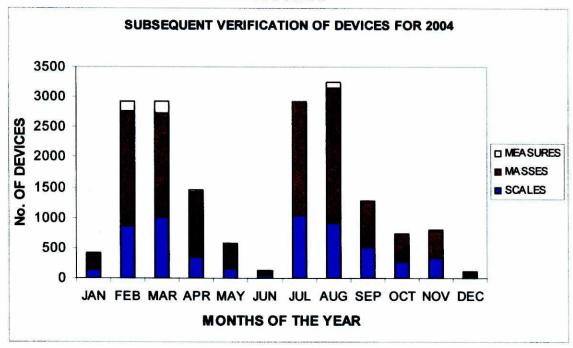
The acquisition and use of the truck to test the accuracy of bulk scales has significant implications for the export trade. Exporters from the various industries, for the first time, have greater assurance about the accuracy in the measurement of their goods, and as a result, can deal confidently and fairly with their buyers overseas. This would ensure equity in trade, much in favour of the Guyanese exporters who would realize greater foreign exchange savings. In addition, in the rice industry, the farmers are pleased about the use of the truck to test the bulk scales at the rice mills before each rice crop, and also, in surveillance exercises, and in the event of complaints raised by their Association.

1.6 Petrol Pumps

In figure 3, the bar graph shows the verification of petrol pumps and bulk meters, for the year 2004 as compared with 2003.

A total of 1,139 petrol pumps and 5 bulk meters were tested of which 380 petrol pumps were calibrated for the various petrol companies and private stations countrywide for the first and second half of the year 2004. This shows a fluctuation in the number of petrol pumps and bulk meters verified during the last three years, since in the year 2003 a total of 1191 petrol pumps and 14 bulk meters were tested of which 308 petrol pumps and 14 bulk meters were calibrated, and in 2002 a total of 1093 petrol pumps and 5 bulk meters were tested of which 484 petrol pumps and one bulk meter were calibrated. This fluctuation could be

FIGURE 2



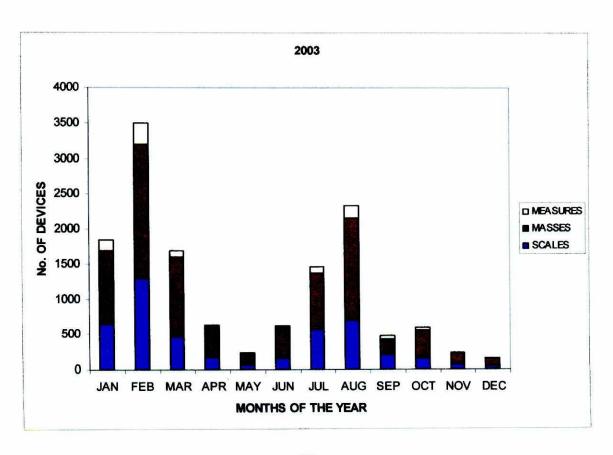
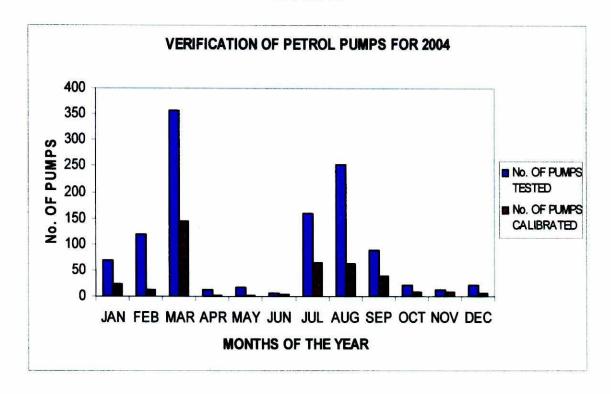
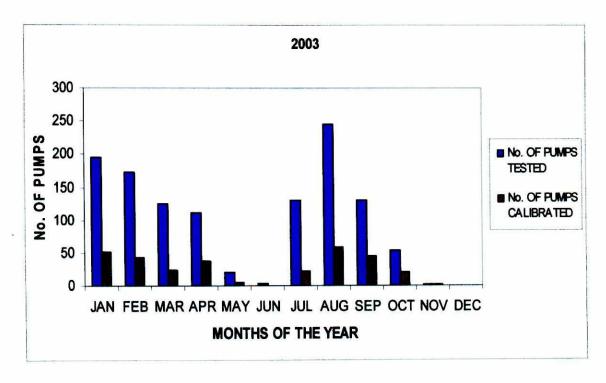


FIGURE 3





attributed to the opening and closing of service stations by companies and private owners.

Non-conformities observed during verification exercises were highlighted to the proprietors of the various service stations visited for corrective actions to be taken. Follow up inspections conducted by GNBS Inspectors revealed that non-conformities highlighted previously were addressed.

1.7 Bulk Meters

Despite the acquisition of a 500 L test measure by the GNBS during the year to conduct the verification of bulk meters and wagon compartments, no significant verification activities were conducted in this regard, since the capacity of the measure acquired is too small to verify the large bulk meters used at terminals. However, the GNBS was able to conduct the verification of 6 smaller meters for Texaco and 1 for Rambarran Enterprises. The GNBS had budgeted for a 2000 L test measure in 2005 to conduct the verification of large bulk meters and wagon compartments.

1.8 Collaboration with Administrative Regions

The GNBS, in collaboration with the Regional Weights and Measures Officers in Regions 2, 3, 4, 6 &7, conducted a significant amount of work on the verification of devices used in commercial trade, surveillance inspections at sale outlets to ensure devices are stamped and metric sensitization throughout the year. However, despite efforts made by the Bureau during the year 2002 and 2003 to have established Weights and Measures offices operating in Regions 1,5,8,9 & 10, no Weights and Measures activities were done in Regions 1, 5, 8 & 9 during the year, 2004, since there are no designated Weights and Measures Officers in these Regions, no proper facilities to conduct the verification of devices, lack of transportation to execute field activities, and lack of participation at National Weights and Measures Monitoring Committee Meetings. However, some verification activities were conducted in Region 10.

As a result, a meeting was held with the Minister of Local Government regarding the difficulties encountered with the execution of Weights and Measures activities in Regions 1, 5, 8 & 9, where the Minister promised his full support in addressing these problems. Further, follow up visits were made by the Director and Chief Inspector during the year to Regions 5, 7, 9 & 10 to re-establish the Weights and Measures programme, and to determine the problems affecting the execution of activities in these Regions.

Region 5

The GNBS held a meeting with the Regional Chairman and the Regional Executive Officer (REO) of Region 5 on 2004-03-03 and representation was

made by the GNBS to the Public Service Ministry (PSM) to effect the employment of a Weights and Measures Officer for the Region. As a result, the Region was successful in obtaining approval for the employment of a new Weights and Measures Officer, which is expected to be effected shortly.

Region 7

With regards to Region 7, a meeting was held with the Regional Chairman and the Weights and Measures Officer in the absence of the REO on 2004-10-07 where it was established that the present Officer has other responsibilities and is unable to effectively carryout her duties under the Weights and Measures Programme. As a result, it was agreed that the Region with the support of the GNBS would make representation to the PSM for the employment of a new Weights and Measures Officer who would be responsible for the execution of the weights and measures and metrication activities only. The Regional Administration is expected to follow up on this matter.

Region 9

A visit was conducted to Region 9 on 2004-11-09 and a meeting was held with the Regional Chairman and the REO resulting in the identification of an Officer to execute Weights and Measures activities in the Region, and the GNBS provided the necessary equipment and basic training for the Officer. However, the Region is expected to provide funding for further training of the Officer in Georgetown, and the purchasing of additional tools required for the verification of devices.

Region 10

The Director and Chief Inspector of the GNBS met with the REO and Regional Chairman of the Region 10 Administration to discuss problems affecting the execution of Weighs and Measures activities in the Region. It was agreed that the Region would identify a person to work on Weights and Measures activities in the Region on a full-time basis, and to attend monthly Weights and Measures meetings, since during recent times much work was not done in the Region and no representation was made at monthly meetings. Further, the Chairman promised to provide transportation to conduct field activities.

1.9 Sensitization Activities

Inspectors of the Department and Weights and Measures Officers were tasked with the responsibility of sensitizing vendors, shopkeepers and other retailers on the use of metric devices and the care and use of these devices to ensure accuracy is maintained. Sensitisation activities were carried out throughout the year during surveillance exercises conducted by Inspectors at shops and other retail outlets. This entailed the advising of shopkeepers to pre-package their commodities and prepare price lists, weigh instead of measure solid products, the practical

demonstration on the use of metric scales, masses and measures, and the distribution of flysheets and conversion charts.

Resulting from these exercises, a total of 2,903 premises were visited and a quantity of 37 scales and masses were converted and verified by the Bureau for 2004, as compared with 39 scales and masses converted for 2003, and 42 scales and 14 masses for 2002 by licensed manufacturers.

Consumers continued to request commodities in imperial quantities despite the fact that only metric devices were used by vendors/shopkeepers. Vendors claimed that if they did not facilitate consumers in this regard, consumers would go to other vendors who were willing to facilitate them, thus creating unfair competition.

1.10 Surveillance Inspections

Inspection activities to ensure devices used for trade were stamped and in good condition were conducted during the months of April, May and June for the first half of the year, and October, November and December for the second half of the year. During these exercises carried out, a total of 3,046 premises and 3,221 stalls were visited for the year 2004.

Resulting from surveillance exercises conducted at markets and shops, a quantity of 641 scales, 1,697 masses and 405 measures were seized and removed, since they were found to be unjust or defective, as compared with a total of 273 scales, 1,405 masses and 237 measures in 2003, and a total of 219 scales, 1,016 masses and 166 measures in 2002.

The increase in the number of devices seized is due to the reluctance of vendors and shopkeepers to have their devices stamped for the first and second half of the year.

Despite significant efforts made by the GNBS to ensure that devices are verified periodically and are in good condition at the time of verification, vendors and shopkeepers are not properly maintaining their devices and are misusing them, resulting in these devices becoming inaccurate, although they were stamped for the corresponding period. In an effort to address this problem, inspectors of the GNBS will be intensifying surveillance inspections at sale outlets, and devices found to be inaccurate or in bad condition would be confiscated.

Vendors/shopkeepers need to ensure that their devices are stamped twice yearly as required by the 1981 Weights and Measures Act and are kept in good condition at all times.

1.11 National Weights and Measures Monitoring Committee Meetings

Monthly meetings of the National Weights and Measures Monitoring Committee were held as scheduled. This Committee is constituted of Weights and Measures Officers of the various Regions, Director of the GNBS (Chairman), and representatives from the Metrication, Public Relations and Metrology and Standards Compliance Departments of the GNBS. Officers who attended the meetings provided feedbacks concerning the progress of activities according to the National Work Programme and problems encountered during the execution of their duties in the Regions. These meetings also facilitated open discussions on problems affecting the effectiveness of the programme, and allowed for coordination of activities countrywide in a timely and organized manner. Meetings were mainly attended by W&M Officers from Regions 2, 3, 4, 6 & 8. Officers from the other Regions rarely attended meetings and as a result were unable to execute W&M activities in their respective Regions, since they were not fully aware of the activities planned at meetings for the programme.

1.12 Review of Weights and Measures Act

The GNBS continued to seek funding for a consultant to review the 1981 Weights and Measures Act, which is out-dated and inadequate to address additional activities currently conducted by the GNBS, and to develop Regulations to give effect to the said Act. However, this did not materialize. Nevertheless, Mr. Tweedsmuir Mitchell, Metrology Consultant, along with GNBS Inspectors commenced the reviewing of the said Act during the third module of the Legal Metrology Training programme conducted this year. Additional work needs to be done to complete the reviewing of the said Act and to develop Regulations for same.

1.13 Public Awareness

Information gathered from field inspections, consumer complaints and verification exercises which were useful for the protection and guidance of consumers were analyzed and prepared routinely throughout the year for publication in the form of releases, notices, newsletters, etc by the Public Relations Department. In addition, Senior Officers within the Department participated in radio and television programmes organized by the Public Relations Department to provide guidance to consumers and to increase the awareness of activities conducted by the Department.

1.14 National Traceability System

A significant achievement of the GNBS during the year was the establishment of a Reference Mass Laboratory that was constructed to house the Primary mass standards and other related equipment under controlled environmental conditions. The project included a survey to determine the calibration needs of companies using weighing and measuring devices in Guyana, which was done using questionnaires and visits to companies. A seminar was held on the importance of metrology for the development of industries and the enhancement of trade and protection of consumers. Further, two Inspectors from the department were engaged in a one week attachment training at the Trinidad and Tobago Bureau of Standards. They were primarily involved in the calibration of temperature and pressure equipment, two areas the Bureau intends to venture into in 2005. As a result of this project, the GNBS is better informed of the calibration needs of companies operating in Guyana, and the training received by Inspectors along with the necessary equipment and standards to be acquired in 2005, would enable the Bureau to provide calibration services in the areas of temperature and pressure. This would address two main needs highlighted by companies during the survey.

1.17 Training of Rice Farmers

As a result of numerous complaints received by the GNBS during the year from farmers regarding short weight of paddy sold by them to Mahaicony Rice Limited (MRL), which company uses mechanical weigh-bridge scales, five training sessions were held for rice farmers and RPA representatives on the operation of mechanical weighbridge scales. These training sessions were held at four MRL locations in Regions 2, 5 and 6 to ensure that farmers and RPA representatives understand the operation of the said scales so as to ensure transparency during the selling of paddy to mills.

1.18 External Meetings

1.18.1 Meeting on Weighbridge scales

Resulting from numerous complaints received by the GNBS during the year from farmers and businessmen regarding short weight of paddy sold to Mahaicony Rice Limited (MRL), which company uses mechanical weigh-bridge scales and inaccurate scales used by the Transport and Harbours Department, respectively, a meeting was held with the Manager of Mahaicony Rice Limited to discuss the conversion of mechanical weighbridge scales used by the company in order to ensure transparency in the weighing process at mills. As a result, the Manager promised to have the scale converted to digital.

In addition, a meeting was held with the Manager of the Transport and Harbours Department regarding the conversion, repair and verification of scales used by the department, and it was agreed that all existing imperial scales would be converted to metric, and defective scales would be repaired and verified urgently.

1.18.2 Meeting with the Commissioner of Police

Because of difficulties encountered by Inspectors of the GNBS when conducting surveillance inspections at retail outlets and markets, the need for Police Officers to accompany Inspectors during surveillance inspections and the filing of prosecution against defaulters had become necessary. As a result, a meeting was convened with the Commissioner of Police on 2004-03-07 regarding the provision of police officers during surveillance inspections at shops and markets, and the prosecution of persons found in breach of the Weights and Measures and Standards Acts. The Commissioner pledged his full support for the activities of the GNBS and indicated that he would notify the Divisional Commanders, accordingly.

However, the GNBS continued to experience difficulties at some stations regarding the soliciting of Police Officers in a timely manner to conduct field activities. A subsequent letter was sent to the Commissioner requesting that arrangement for Police Officers be done through the Officers in-charge of stations to avoid delays.

1.18.3 Meeting with Rice Farmers and Millers

The Chief Inspector attended four meetings with farmers and millers convened by the GRDB in collaboration with the RPA in Regions 2, 3, 5 and 6 during the year. At these meetings, millers were sensitized on the requirements governing the operation of weighing and measuring devices, and basic guidelines to ensure transparency in the rice industry. Millers present at the meetings supported the move by the GNBS and promised to adhere to the guidelines provided. Follow up visits were conducted by Inspectors at mills during verification activities revealed that the basic guidelines were in place at mills.

1.18.4 Complaints

Rice Farmers

Resulting from complaints received from farmers regarding short weight and inaccurate dockage and moisture content, cabinet convened a meeting with representatives from the GNBS, GRDB and RPA to address the concerns raised. As a result, visits were conducted by the GNBS in collaboration with GRDB and RPA to 31 rice mills in Regions 2, 3, 4, 5 and 6 to observe the operations of these mills and to provide suggestions for improvement in order to ensure transparency. In addition, letters were sent to millers informing them of the areas that would be monitored by the GNBS and what is required of them to ensure that these requirements are met. Further, continuous monitoring was done by GNBS Inspectors during verification activities and surveillance inspections and it was observed that the correct procedures were being followed. It was, however,

reported by farmers that in the absence of GNBS Inspectors some millers do not follow the correct operating procedures, as a result of which, they were cheated.

Weight of LPG Cylinders

A complaint was received from the Consumer Affairs Division of the Ministry of Tourism, Industry and Commerce regarding the short weight of LPG 20 pound cylinders offered for sale. Checks were conducted by the GNBS in collaboration with the Ministry, on these cylinders at sale outlets. Tests conducted revealed that the cylinders contained the correct amount of LPG as indicated on the containers.

Advertisement of Petrol Products in Imperial Units

Routine checks were conducted at service stations countrywide to ensure products offered for sale are in metric quantities, since it was reported to the GNBS that some service stations were advertising their products in imperial quantities although pumps are graduated in litres. Checks conducted by the GNBS revealed that most service stations were advertising and selling in metric quantities. Those that were advertising in imperial quantities were advised to change same to metric in the presence of Inspectors. This was necessary to avoid the deception of consumers when purchasing fuel.

2.0 STANDARDS COMPLIANCE PROGRAMME

The Standards Compliance Programme is geared to ensure protection of consumers by the monitoring of some 23 categories of commodities imported or manufactured locally to ensure compliance with the respective national standards. Included in the Programme is the investigation of consumer complaints received regarding the quality of products purchased and services provided. It also involves the inspection of commodities at sale outlets based on information received from shipping manifests, ports-of-entry inspections based on requests from importers, and also, importers referred to the GNBS by Customs and Trade Administration.

The Standards Compliance Programme also deals with the certification of rice exported from Guyana to Jamaica. This entails the sampling of rice at wharves and mills and the testing of same to determine the broken content, prior to exportation. Certificates are normally issued for each consignment exported.

2.1 Monitoring of Imported Commodities

2.1.1 Registration of Importers

A total of 102 importers of commodities monitored by the GNBS under the Standards Compliance Programme were registered for the year, as compared with 85 for 2003, 94 for 2002, 213 for 2001 and 282 for 2000. This indicates that there has been a slight increase in the number of importers who registered with the GNBS this year as compared with the last two years.

However, there has been a significant decrease over the last three years when compared with the years 2000 and 2001, during which Inspectors were stationed at the ports of entry. The increase in the number of Importers registered for 2004 could be attributed to continuous efforts made by the Bureau during the year to work closely with Customs to perform the necessary agency functions i.e. to refer importers to the GNBS for registration and inspection of their commodities imported, and the provision of shipping manifests.

However, despite the efforts and commitment given by the Customs and Trade Administration, the Standards Compliance programme continued to be ineffective, due to the lack of cooperation from Customs Officers stationed at the ports-of-entry, resulting in commodities monitored by the GNBS being cleared without examination. This has significantly contributed to the increase in the number of consumer complaints relating to sub-standard quality products imported.

Guidelines on the importation and sale of commodities monitored by the Bureau were issued to importers at the time of registration. In addition, notices were

published in the newspapers and on television educating importers and dealers on the requirements for the importation of commodities monitored by the Bureau.

2.1.2 Registration of Used Tyre Dealers

Regarding used tyres, 59 dealers were registered with the GNBS for 2004, as compared with 56 for the year 2003, and 50 for the year 2002. This indicates that the Bureau maintained the continuous monitoring of tyre dealers each year. Inspections of 59 registered tyre dealers' premises were done during the first quarter of the year to ensure that tyres offered for sale complied with the relevant quality requirements. For example, tyres should be free from cracks on sidewalls, and should be stored in accordance with requirements outlined in the Code of Practice for the Storage of Tyres. Pallets should be used to store tyres away from direct sunlight, and permits should be obtained to sell used tyres. In situations where minor non-conformities were observed, dealers were given specific timeframe to take corrective actions and follow up inspections were conducted to ensure compliance, prior to the issuing of permits. In addition, periodic inspections of premises and tyres offered for sale were conducted at sale outlets, resulting in a total of 82 inspections conducted throughout the year and a quantity of 377 defective tyres were destroyed, as compared with 440 for 2003 and 449 for 2002.

In some situations, dealers were reluctant to allow Inspectors to destroy defective tyres found during examination at sale outlets, since they were experiencing difficulties with importers in obtaining exchanges or refunds for tyres destroyed. The GNBS would address this matter in the upcoming year, since it was previously discussed and importers had agreed to facilitate exchanges or refunds since the tyres imported were not examined at the ports of entry.

2.1.3 Surveillance Inspections

Based on information obtained from shipping manifests, 205 surveillance inspections were carried out at sale outlets and importers' bonds to ensure commodities monitored by the Bureau complied with their respective National Standards. Products examined during the year 2004 included tyres, paints, footwear, garments, PVC pipes, water meters, soap powders, electrical appliances, textiles, furniture, cigarettes, safety matches, gas stoves, animal feeds and soap powder. Commodities examined were generally in compliance with their relevant labelling requirements, except for tyres, electrical appliances and water meters, where information relating to the DOT marking and Test Certificates had to be submitted, respectively.

The discontinuation of ports of entry inspections by the Bureau continues to affect the effectiveness of the Standards Compliance programme, since importers are avoiding the Bureau. In addition, Inspectors continued to experience great difficulties when examining commodities at sale outlets, and in addressing products that are not in compliance.

In addition, intensified product- by-product campaign inspections were conducted on cell phones, furniture, jewellery, safety matches, water pumps, LPG regulators and candles, whereby emphasis was placed on a particular product over a short period of time.

Resulting from examinations at sale outlets, a total of 1,326 inspections were conducted. and a quantity of 27 LPG regulators, 402 packets safety matches, and 153 packets of candles were seized and removed, and 226 water pumps were placed on hold pending modification and re-labelling, as compared with 2,497 inspections for 2003 where a quantity of 2,363 packets of cigarettes, 9314 boxes of safety matches and 248 packets of razor blades were seized and removed, and 350 pieces of furniture were placed on hold pending re-labelling. It should be noted that products focused on during the year 2004 in the product by product campaign were different from those in 2003, since emphasis was placed mainly on products for which numerous complaints were received.

2.1.4 Monitoring of Fertilisers

The examination of fertilizers continued at ports-of-entry to ensure compliance with the national labelling standard. The net masses of the bags were also checked to ascertain compliance with the stipulated quantities. In addition, samples were taken and tested to ensure the percentage of active ingredients were in compliance with the stipulated quantities. For this year, a total of 31 inspections of Urea, TSP, NPK and lime stone fertilizers were conducted at the ports of entry, as compared with 28 for 2003, and 27 for 2002.

Of the 24 tests conducted on samples acquired and checks conducted on the net contents of bags, it was observed that the percentage of active ingredients for four sets of samples tested were below the stipulated quantities and on three occasions, the net weights of the bags were found to be below the stipulated quantities. This was discussed with the importers of the fertilizers, and checks conducted on subsequent shipments revealed that the quantities of active ingredients and the net weights were satisfactory.

2.2 Monitoring of Locally Manufactured Commodities

The monitoring of locally-manufactured commodities continued during the year, being a requirement of the WTO/TBT Agreement to monitor both locally manufactured and imported commodities, in order to ensure consumer satisfaction. Three manufacturers registered with the GNBS as compared with nine manufacturers for 2003. These were Denmor Garment Manufacturing Inc, NDS Furniture and general Store and AH&L Kissoons Ltd, who manufactured

garments and furniture, respectively. There has been a significant decrease in the number of manufacturers registered with the Bureau, due to the lack of cooperation from manufacturers to participate in the programme, despite visits conducted by GNBS Inspectors to the various manufacturing companies and notices published by the Communication Department sensitizing them on the importance of the programme and the need to annually register with the GNBS. Stronger enforcement activities would be pursued such as, the seizing of commodities not in compliance with the respective Guyana National Standards and the prosecuting of manufacturers in the new year.

The examination of commodities manufactured by the three registered manufacturers was carried out routinely throughout the year. Commodities examined were found to be in compliance with their respective national standards. No complaint was received by the GNBS for 2004 regarding commodities manufactured by the registered companies.

2.3 Consumer Complaints Investigation

During the year, a total of 77 consumer complaints were received, as compared with 24 for 2003, and 35 for 2002. There has been a significant increase in the number of complaints received for 2004 as compared to the two previous years. This increase could be attributed to the release of commodities at the ports-of-entry by the Customs & Trade Administration without examination by the GNBS.

The nature of complaints received included defective products, inadequate labelling, and poor quality services provided. Complaints received related primarily to products such as electrical appliances, cell phones, car batteries, tyres, concrete blocks, footwear, sand, water pumps, candles, chair sets, stoves, generators, solar batteries, and defective scales.

The commodities for which complaints were received in 2004 were similar to those received for 2002 and 2003. The complaints received were investigated with 69 being resolved and 8 were referred to the Ministry of Tourism, Industry and Commerce.

Although most proprietors of stores from which commodities were purchased cooperated with the GNBS in resolving consumer complaints, there were a few who were reluctant to address complaints drawn to their attention. This resulted in the complaints being referred to the Ministry. In situations where there were defective products, inspections were conducted and products not in compliance were placed on hold pending corrective actions.

Some of the significant complaints received during the year related to the Pedrolla water pump, which was found to be a counterfeit of the Pedrollo brand, and of inferior quality based on tests conducted; used cell phones, which were sold to consumers as new, and subsequently became defective, and the Venus brand

candles, imported from Trinidad and Tobago, which bended shortly after they were lighted, thus, compromising the safety of users.

2.4 Promotion of Standards Compliance Activities

During the year, information arising from various activities conducted under the Standards Compliance programme was disseminated to the public via the Communication Division in the form of releases, advertisements, news conferences and meetings. Numerous advisories relating to defective products discovered during surveillance inspections, such as safety matches, candles, water pumps and LPG regulators were published to guide consumers. Further, Officers from the Department participated in various television and radio programmes, where information on activities under the programme was disseminated. In addition, information was featured in the Bureau's quarterly new letter.

2.5 Strengthening the Standards Compliance Programme

In addition to the 21 categories of commodities monitored by the Bureau in 2003, cell phones and jewellery were included on the list for 2004. This was due to the dissatisfaction of consumers regarding the quality of cell phones offered for sale, and the inadequate labelling of jewellery.

2.5.1 Cell Phones

A meeting was held with cell phone dealers and importers on 2004-06-25 to discuss issues regarding the sale of the cell phones, such as, used phones being sold as new ones, cell phone accessories, labelling, customer satisfaction, after sales services, and the approach to be taken by the GNBS to ensure that quality phones are offered to consumers.

A total of 14 Importers/dealers attended the meeting, and discussions held revealed that some importers/dealers were involved in malpractices, such as, replacing the casing of used and refurbished phones with new casings and selling them as new phones, replacing components within the phones with inferior ones, and resetting call-timers to mislead consumers. As a result, it was recommended that the GNBS should take the necessary steps to educate consumers accordingly, conduct periodic decoy operations at sale outlets and register importers and dealers of cell phones. However, for the year 2004 only 2 dealers of cell phones registered with the GNBS. Further, with the introduction of the GSM phones on the local market, the GNBS would take steps in the New Year to expand its capabilities to monitor these phones.

2.5.2 Jewellery

Several meetings were held with jewellers in Regions 2, 4 and 6, and letters were sent informing them of the labelling requirements for jewellery articles

manufactured and offered for sale in Guyana. In addition, Inspectors conducted visits in Regions 2, 4 and 6 where a quantity of 79 sale outlets were visited and jewellers were sensitized and educated on the labelling requirements. As a result, January 03, 2005 was identified as the deadline for the labelling of all gold articles available for sale. Further, jewellers were informed that they are required to register with the GNBS annually to manufacture gold articles.

2.5.3 Cooperation from Customs & Trade Administration

Several meetings were held with the Customs and Trade Administration (CTA) and the Guyana Revenue Authority in order to solicit the assistance of Officers to perform agency functions for the GNBS, which include the referral of Customs entries to the GNBS and the supplying of copies of shipping manifests. However, despite repeated commitments from the CTA, Customs Officers did not routinely carry out these functions at the ports of entry as expected, resulting in the clearance of commodities without inspection by the GNBS. This reduced the effectiveness of the Standards Compliance programme of the Bureau.

As a result of poor cooperation of the CTA in acquiring shipping manifests, meetings were held with the President of the Guyana Shipping Association and various shipping agencies to acquire copies of shipping manifests. These meetings were successful and as a result, the Bureau is now receiving copies of the manifests from these agencies.

2.6 CPEC Furniture Project

Inspectors participated in a seven-day furniture training project funded by CPEC, which commenced on 2004-01-27 and completed on 2004-02-04. The project included a three-day workshop on the code of practice for furniture manufacturing, designing and assembling, the practical application of standards, inspections of furniture at sale outlets, and the review of the Code of Practice for the Manufacturing of Furniture. Visits were also conducted to manufacturers' premises to examine their operations and to determine the quality of furniture manufactured locally. In addition, Inspectors were involved in a one-day theoretical and practical training session on the inspection of furniture to determine structural, workmanship and finishing defects.

The training received was beneficial to Inspectors and Manufacturers since Inspectors are better equipped to conduct the examination of furniture, provide the necessary guidance to manufacturers, and are now more aware of the status of the furniture industry in Guyana. Manufacturers were educated on various techniques in the manufacturing, designing and assembling of furniture to meet the needs of both the domestic and international markets.

As part of the GNBS in-house training conducted by representatives from each department throughout the year, a half-day training session was held on activities

conducted under the Standards Compliance programme by Inspectors to increase the staff awareness and personal development of staff members.

2.7 Certification of rice

The certification of rice exported to Jamaica continued during the year 2004 as a result of a Memorandum of Understanding signed between the GNBS and the Jamaica Bureau of Standards in 2003. The Jamaican Authorities were dissatisfied with the quality of rice exported from Guyana to Jamaica, despite the certification by the GRDB. During the year, Inspectors conducted sampling at wharves and at rice mills, and samples collected were tested to determine the percentage broken. As a result, 1,425 containers (106,128 metric tonnes) of white and parboiled rice for 10 exporters were sampled and analyzed prior to exportation to Jamaica, as compared with 1,124 containers (28,706 metric tonnes) for 2003.

During the year, Inspectors of the GNBS encountered difficulties with some millers regarding the late arrival of trucks and containers, inadequate quantity of rice to fill containers, and untimely notification of the GNBS for sampling of rice at wharves and mills, resulting in Inspectors having to work late hours in the nights and weekends, and the cancellation activities scheduled by the Department. Letters were sent to these millers informing them to desist from these malpractices and it was recommended that proper arrangements and notification be made to facilitate the timely sampling of rice at wharves and mills. The commencement of the certification of rice exported to Jamaica by the GNBS has satisfied the Jamaican authorities, and has resulted in an improvement in the quality of rice exported to Jamaica, since exporters are forced to sell their rice at extremely low prices in Jamaica if shipments fail to meet the requirements.

Despite the employment of four Inspector Assistants by the Bureau during the year to conduct the sampling of rice at wharves and mills, the certification of rice activities continued to severely affect the other activities of the department due to the increase demand for Inspectors to facilitate certification activities.

3.0 STANDARDISATION

The goal of the standardization department is to promote standardization in the production of goods and services for the advancement of local and foreign trade, and consumer protection. The core functions of the Department are producing, promoting and monitoring the implementation of national standards.

There are four (4) Technical Officers in the Standardisation Department, assisted by two (2) other Technical Officers drawn from the other Departments of the Bureau, who function as Technical Secretaries of the fifteen (15) Technical Committees, along with their associated Sub-Committees and Working Groups to produce the standards relevant to the needs of stakeholders.

The fifteen (15) Technical Committees established by the Bureau are:

- 1. Agriculture;
- 2. Foods:
- 3. Chemical;
- Electrotechnical engineering;
- Mechanical engineering;
- Legal metrology;
- 7. Consumer products;
- 8. Cosmetics and Medical devices;
- 9. Laboratory management;
- 10. Civil engineering;
- 11. Safety;
- 12. Tourism;
- 13. Wood products;
- 14. Environment; and
- 15. Management Systems.

Each committee consists of representatives from general interest (those who are not associated with production, distribution, direct use, or regulation of products, materials or services); producer interest (those who are predominantly involved with the production, promotion, retailing or distribution of products, materials or services); regulatory authority (those who are predominantly involved in regulating by statue, the use of products, materials or services); and user interest (those who are predominantly using the products, materials or services). Each Committee meets once per month on an average to deliberate on the standards listed under its work programme for the year.

The development of a standard involves several stages. A proposal received by the Bureau is submitted to the National Standards Council for approval, after which it is assigned to one of the fifteen Technical Committees for the development of a draft standard by the Technical Secretary. After deliberating on the draft standard, it is exposed for public comments which are considered by the

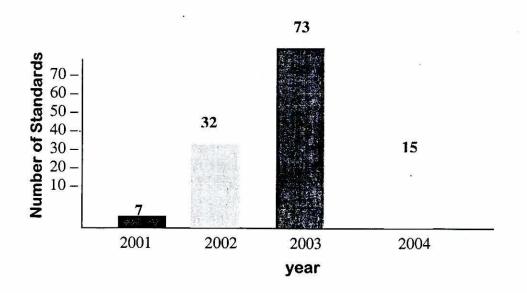
Technical Committee and the final draft is submitted to Council for approval as a voluntary standard. To make the standard mandatory, the Minister of Tourism, Industry and Commerce has to seek Cabinet's approval prior to the preparation and gazetting of an Order signed by the said Minister.

3.1 Standards development

3.1.1 Status of standards development

STANDARD DEVELOPMENT STAGE	YEAR	EAR
	2003	2004
Standards under preparation and revision by Technical Committees and Sub-Committees	50	17
Standards issued for public comments	8	6
Standards approved by National Standards Council (NSC)	73	15
Standards approved by Cabinet as mandatory standards	4	0
Standards to be printed	30	1
Standards published	47	14
Standards withdrawn	44	6
Mandatory standards	4	0
Standards in publication	264	305

During the year 2004, fifteen (15) National Standards (11 formulated and 4 revised) were approved by NSC (see Appendix 1). The bar graph below shows the number of standards approved by NSC over a four year period.



The Standardisation Department Technical Committee Work programme for 2004 was revised in July to focus on the development of priority standards for the remainder of the year. Of the targeted total of ninety-one (91) standards, fifty-three (53) were withdrawn from the work programme, leaving thirty-eight (38) standards to be prepared and revised by Technical and Sub-Committees.

Of the fifty-three (53) standards, thirty-three (33) were standards under development by the Caricom Regional Organisation for Standards and Quality (CROSQ). Guyana's participation in the development of these CROSQ standards were addressed under objective 3.0 "International Activities" of the Standardisation Department Work programme instead. The remaining Twenty (20) standards were transferred to the 2005 Technical Committee Work programme due to the unavailability of reference standards for the preparation of draft Guyana Standards.

Out of the thirty-eight (38) standards, fifteen (15) were approved by National Standards Council. Fourteen (14) were published, increasing the total number of standards in publication to three hundred and five (305). The remaining standard is being edited by the editorial committee. The remaining Twenty-three (23) standards are under preparation and revision by Technical and Sub-Committees. Six (6) of these standards were issued for public comments. The remainder seventeen (17) standards would be transferred to 2005 work programme.

3.1.2 The National Building Code

By virtue of the urgent need for adequate building standards within the construction sector, the Guyana National Bureau of Standards (GNBS) and the National Building Code Committee are currently engaged in the revision of its existing nine (9) Sections of the Codes and the further development of five (5) new Sections.

The Sections under revision are:

- Electrical
- Plumbing
- Fire Safety, Use and Occupancy
- Enforcement
- Structural Timber
- Structural Steel
- Medium Rise Building
- Concrete and Block Masonry.

The Sections under development are:

- Solar Energy Installation
- Reinforced Concrete Trestle
- Housing Schemes and the Environment
- Loadings
- Excavation and Foundation

Eleven (11) Sub-Committees were established to work on the development of these codes. Monthly and bi-monthly meetings were convened in which two Sections i.e Fire Safety, Use and Occupancy and the Enforcement Standard were in their first draft stage and are out for public comments. Vital base documents were obtained and the scope and work plan were defined for the remaining Sections.

The completion of these codes especially the enforcement section should provide the base for the setting up of a Building Authority. The Building Authority shall be a Statutory Autonomous Body, managed and run by professional Engineers, Architects and supported by competent technical Inspectors. It's primary function would be to provide for the establishment and enforcement of technical standards for buildings to ensure that buildings are safe and have means of escape from fire; the registration of building practitioners and building review consultants; the regulation of building matters; the granting of building and occupancy permits; and the establishment of a building appeal process for related purposes.

The GNBS is soliciting funding for the project through CARANA under the Guyana Trade and Investment Support Project. A Project Proposal was completed and submitted to the Ministry of Tourism, Industry and Commerce, for support and submission to CARANA.

The various Sub-Committees are expected to complete the first draft of their standards in six months after which they would be ready for public comments. The GNBS's ultimate objective is to have a National Building Code with the relevant requirements that would apply to design construction and occupancy of new buildings, and the alteration, reconstruction, demolition, removal, relocation and maintenance of existing buildings. Moreover, the GNBS is anticipating a greater degree of quality assurance in the building industry, thus ensuring improved efficiency, reliability, safety and cost benefit factors.

3.1.3 The development of standards faced many challenges during 2004, including:

(i) The lack of a quorum at Technical Committee and Sub-Committee meetings, delayed the development and consensus approval of fifteen (15) committee draft standards. The development of these standards was tremendously delayed due to members and stakeholders not reviewing standards before coming to meetings and forwarding the comments to the

respective Committees. The lack of a quorum at Technical Committee meetings could have been attributed to the absence of payments of stipends to members.

- (ii) The unavailability and limited access to technical data and reference standards delayed the preparation of twenty-two (22) draft standards by Technical Secretaries. Efforts to purchase some of these were futile, because they were very costly.
- (iii) Consecutive days of blackouts and subsequent frequent blackouts. This delayed the processing of draft Guyana Standards through the standard development stages.

Nevertheless, despite the many associated difficulties of the standards development programme, Technical Secretaries made significant progress in the production of standards.

3.2 Standards promotion and implementation

3.2.1 A meeting with Technical Secretaries of the GNBS, members of all Technical Committees, Sub-Committees and Working Groups was held on February 19, 2004 in the Rupununi Room of the Hotel Tower. Presentations were conducted by Mr. Melvyn Sankies, Chairman of National Standards Council on the "Importance of standardization in the National Economy"; Dr. Gocool Persaud, Guyana Manufacturers Association on the "Benefits of the implementation of standardization"; Ms. Shune Vickerie, Guyana National Bureau of Standards on the "Procedure for standards formulation"; and Dr. Chatterpaul Ramcharran, Director, Guyana National Bureau of Standards on the "Status of standardisation in the National Economy".

The holding of this meeting was one strategy used to try to motivate committee members to attend meetings in order to progress with the development and production of standards. Throughout the year, it had been a challenge to obtain quora for many meetings of Technical Committees.

The meeting was attended by seventy-five participants whose recommendations included that standards for indigenous products such as casareep, nibbi furniture, food packaging materials, alarm systems and preservation of wood should be formulated.

Also, consumers should be educated on standardization, so that they would be able to make informed decisions when purchasing commodities, and that stipends should be paid to members of Technical Committees as an encouragement to attend meetings.

3.2.2 A symposium for the construction sector was held on July 13, 2004 in the Rupununi Room of the Hotel Tower. Presentations were conducted by Mr.Melvyn Sankies, Chairman of National Building Code Committee on the "National Building Code and what it means for the construction industry in Guyana" Mr. William Wilson, on the "The need for higher awareness of the Codes in the education sector"; Mr. Rawle Edinboro on the "Building codes as a key to urban development"; and Ms Beverly Johnson on the "Enforcement of standards for the protection of health and safety of citizens".

The symposium was attended by forty-two participants whose recommendations included that the Building Codes should be linked with the registration of Professional Engineers and Architects, and that standards for materials used in buildings should be developed.

The symposium was a success and should be conducted in other Regions.

3.2.3 Ministries of Government and the private sectors were informed about the National Standards formulated for 2004 via correspondence and the GNBS newsletter. Some responded by purchasing the needed standards from the GNBS.

The difficulties encountered were the poor attendance of key public and private sectors invitees and the availability of finance at the GNBS to conduct these meetings and symposia in the other Regions of Guyana.

3.3 Regional and international activities

3.3.1 As the WTO Enquiry Point for standards and related matters, the GNBS Standards Development Work Programme for 2004 was submitted to the WTO Secretariat. Members of WTO will be aware of the standards and technical regulations under formulation and formulated by Guyana.

Request for two (2) of Guyana's Technical regulations: GYS 9-15:2003 Specification for labelling of garments and GYS 9-16: 2003 Specification for labelling of textiles were submitted to the WTO Enquiry Point/Standards Council of Canada for comments.

- 3.3.2 Seven draft Caricom Standards (see Appendix 2) which were formulated by the Caricom Regional Organisation for Standards and Quality (CROSQ) were reviewed. Some of Guyana's comments were considered and incorporated into the revised draft standards.
- 3.3.3 Nine Caricom Regional Standards were submitted to the Ministry of Tourism, Industry and Commerce (See Appendix 3) to seek Cabinet's approval as mandatory national standards. This matter is still outstanding.

3.4 Codex

- 3.4.1 The Guyana National Bureau of Standards (GNBS) was established as the National Codex Contact Point in 1985, following Guyana's admission to the Codex Alimentarius Commission (CAC). As the National Secretariat, the GNBS:
 - (i) Disseminated two hundred and seventy-eight (278) codex documents to the Ministry of Agriculture and the Food and Drug Department, for information purposes. The main difficulty encountered was the delay in receipt of codex documents from the Codex Alimentarius Commission.
 - (ii) Conducted a half-day decision-making session titled "Restructuring of the National Codex Contact Point to ensure active participation in Codex matters relating to Guyana's priority areas" in collaboration with the Food and Agriculture Organisation of the United Nations. The session was held on Thursday July 15, 2004 at the Emba-Sea Courtyard, Kitty, Georgetown. The objectives of the session were to conclude on an operational structure for the National Codex Committee and to identify Guyana's priority areas of participation in the work of Codex.

The session decided on the organogram for the National Codex Committee and identified the following areas as priority areas for Guyana's participation:

- Fruits and Vegetables (organic and non-organic)
- Rice (organic and non-organic)
- Poultry and Meats
- Sugar (organic and non-organic)
- 3.4.2 Officers from the Codex Secretariat facilitated the execution of the FAO Funded project TCP/GUY/2801 'Strengthening of the Food Control System'. An international consultant in codex matters, Ms. Galina Leasenco, was dispatched to Guyana for a second mission, the Terms of Reference of which were to:
 - Review and analyse the conclusions of the report of the one-day sensitization session prepared by the GNBS.
 - Prepare an Action Plan for the implementation of National HACCP in the Food Procession industry.
 - Prepare an operational plan for the efficient and effective management of the Codex Committee.
 - Train two (2) Technical Officers in the operational management of the Codex Secretariat.
 - Train two (2) Technical Officers in identifying, cataloguing, classifying and indexing of codex documents, standards and texts.
 - Assist the GNBS to design a web page for the Codex Contact Point.

Develop a step by step model to incorporate the private sector in the work of the Codex Secretariat.

The outputs from the mission were as follows:

- Guyana's application to the Codex Trust Fund was completed and submitted.
- Codex Secretariat's e-mail address was established and was included in the FAO mailing list.
- The database of National Codex Committee members was established.
- A draft Operational Plan was prepared.

In addition, a group discussion was held on the operation of a Codex Secretariat and the organization of Codex documents.

- 3.4.3 A meeting of the National Codex Committee was held on Thursday, November 18, 2004 at 09:30h in the Conference Room of the GNBS. The objective of the meeting was to discuss the items of interest to Guyana on the Provisional Agenda of the Coordinating Committee for Latin America and the Caribbean (CCLAC) in order to present Guyana's position at the 14th Session scheduled for November 29-December 03, 2004. The Committee discussed in detail Agenda item 8(a) strategic plan for the CCLAC and formalise Guyana's response. Also, the computer needs assessment questionnaire (Agenda item 8(b) was completed and submitted to CCLAC.
- 3.4.4 A Technical Officer was nominated as an alternate to represent Guyana at the 14th session of the FAO/WHO Coordinating Committee for Lain America and the Caribbean (CCLAC) held in Buenos Aires, Argentina, November 29-December 03, 2004.

The session began at 10:00h on Monday, November 29 with the adoption of the Provisional Agenda and discussions included:

- Report on activities of FAO and WHO complementary to the work of the Codex Alimentarius Commission.
- Capacity building for food standards and regulations.
- Information and reports on food control and food safety issues including codex standards.
- Consumer participation in food standards setting at the codex and national level.
- Review of the Regional Coordinating Committees
- Strategic Plan for the CCLAC.
- Survey on the computer-related needs of the Region.
- Guidelines for Food Safety in Tourist Zones.

The experiences garnered from the attendance at this meeting will serve to enhance the effectiveness and efficiency of the Codex Secretariat.

4.0 QUALITY MANAGEMENT SYSTEMS

The goal of the quality management systems programme during 2004 was to provide technical assistance in the form of consultancy and training to manufacturing and service industries in Guyana in order to prepare them for the global market system. This support came mainly through the CPEC/GNBS ISO 9001 Project and a series of training mainly in the area of documentation, implementation and auditing of quality management systems. Despite the many challenges, the programme was able to achieve many of its goals for the year for most part. Greater demands lie ahead in 2005 and the programme is taking every opportunity to ensure it is capable of rising to the occasion, provided that the requisite resources are in place.

4.1 Technical Assistance to Companies

The CPEC/GNBS ISO 9001 Project which was approved in September 2003 aimed to provide technical assistance to 10 companies seeking to achieve ISO 9001:2000 compliance. Major funding for this project was provided for by CIDA, the GNBS and the participating companies. The project started positively this year in an effort to prepare the ten (10) companies to be certified to the International Standard, ISO 9001. The objective was to have the said companies in a state of readiness for certification by the end of December, 2004.

4.1.1 Gap Analysis

In January, Gap Analysis audits were conducted and completed at the companies. The audits were facilitated by the Consultant, Mr. Owen Ramsay with support from GNBS auditors, Mr. Jowala Somai, Mr. Anthony Ross, Ms Ramrattie Karan, Ms. Candaicy David and Mr. Robindranauth Bridgemongal. The purpose of these Gap Analysis audits was to determine to what degree the existing management system of each company conforms to the requirements of ISO 9001:2000 and to provide a plan for meeting all the requirements.

The Gap Analysis audits were conducted over a period of two days per company without any major hiccups. The audits were of tremendous benefits to the GNBS Auditors since it provided them the opportunity to further develop their Audit skills. This further enhanced the GNBS status as a major support to industry in the area of quality management systems.

The results of the audits revealed that many of the required processes for a quality management system were already in place especially in the product/service realization processes; however these processes had to be altered to satisfy the ISO 9001:2000 requirements.

4.1.2 Training Required

A special workshop on Implementation of a Quality Management System and Statistical Process Control was held on February 04 & 05, 2004 for the ten companies on the project at the time. This workshop was facilitated by Mr. Owen Ramsay and was held at the Guyana National Bureau of Standards. The workshop provided the quality coordinators of the companies with the skills required to launch the documentation and implementation processes within their companies since most of these coordinators had no experience in documentation and implementation of quality systems. The workshop also provided them with some knowledge in the application of basic statistical process control and data gathering process. This workshop was pivotal for the Quality Coordinators since it was necessary to understand the data that would be outputted by the quality systems in order to make sound decisions based on facts.

On February 16-18, a three-day training programme which was facilitated by Premier Quality Service Limited, a subsidiary of the Trinidad and Tobago Bureau of Standards, was conducted at the Hotel Tower for participants from the companies as well as the GNBS. A total of 22 persons attended the training programme on Internal Quality Audit. Audits are used to determine the status of implementation and the effectiveness of a quality management system.

4.1.3 Guidance to Companies

During the period from March 04 to August 06, 2004, Consultants from Delphi (Mr. Orett Campbell and Ms. Margaret Weston who are premier quality management systems Auditors/Consultants based in Trinidad & Tobago, with a wealth of experience working with industries in the Caribbean and providing training to many organisations) were contracted to provide the expert support to the project, and they, along with the GNBS auditors, provided technical guidance to the companies involved in developing their quality management systems documentation. The GNBS staff during this phase visited the Quality Coordinators and quality teams on a weekly basis. They also maintained daily telephone contacts to resolve any issue or challenge which may have arisen. In critical cases, these issues were forwarded to the Principal Consultants (Delphi Consultants) for their comments via email.

The Consultants spent one full working day at each company upon their visits to support the documentation and implementation processes. The ten companies were divided between the Consultants as outlined below. However, two companies withdraw from the project; these were SOCOCO Inc. and Caribbean Container Inc. Mr. Campbell was identified as the key communicator via email. This was agreed to ensure there is efficiency in the communication processes.

During the process of implementation, the Consultants identified that the area of metrology was weak within each company and recommended that the GNBS should provide the necessary support to the companies since monitoring and measuring devices need to be traceable to the national standard. The GNBS subsequently implemented a sub-deliverable of the CPEC Project to review the area of metrology in Guyana.

The eight remaining companies and areas of responsibility were as follows:

Orett Campbell	Margaret Weston		
Guysuco	Kayman Sankar & Co		
Guyana Stockfeeds Inc.	GNSC		
Edward B Beharry & Co ltd.	GNIC		
Aeronautical School	DENMOR Garments Inc.		

From August 07 to November 15, 2004, the companies worked diligently to implement the documentation developed. The GNBS provided the support training for the company's internal quality auditors and general and/or specific quality awareness. During this period the companies also began their internal audits of the system.

With the pre-assessment of the quality systems of the companies due in January, a series of audits were conducted at each of the eight remaining companies during the period November 22 to December 03, 2004. The Consultant did not audit the companies they were responsible for, as this provided fresh eyes to each system. The relevant audit report was completed and submitted to management of each company.

The results of the Audit are as follows:

While the production related areas of the quality management systems of **Denmor Garments Manufacturer and Guyana Stockfeeds Inc.** appear to be reasonably well implemented, the non-production related areas are not and are generally not in compliance with ISO 9001. One of the main reasons for this is that these companies have just substantially completed the documentation phase and have just begun the implementation phase.

Based on the results of the audit, these companies will not benefit from a preassessment before the end of February at the earliest. However if the recommendations provided in the audit reports are effected and serious implementation efforts take place by the end of February 2005, registration would be possible by the end of April 2005. The quality management the other systems of six companies (GUYSUCO, GNSC, GNIC, Kayman Sankar, Edward Beharry and Company Ltd. and Aeronautical School) are reasonably well implemented, particularly with regard to the control of production (part of product realization), monitoring and measurement of product and processes, and resource management. These companies are well placed to comply with all of the requirements of the Standard and will be ready for the pre-assessment by the end of January 2005 and for final certification by the end of March 2005 if recommendations provided to them in the audit reports are implemented expeditiously and consistently.

4.2 Micro and Small Enterprise Development (MSE)

A project proposal was developed for the implementation of the MSE hybrid standard. This proposal targets ten export-oriented MSEs and seeks the involvement of other agencies such as IPED, GSBDF, GSBA, Department of Industry, MTI, Go—Invest and GTA. A special meeting was held with these agencies to decide on the way forward for this proposal. It is envisaged that some special funding would be acquired to implement the activities of the proposal.

The GNBS held a workshop for Micro and Small Enterprises in Guyana. This workshop was held in collaboration with Empretec on Tuesday, November 16, 2004 in the Training Room of the GNBS. The objective of the workshop was to provide guidelines for micro and small enterprise (MSE) to enable them to:

- understand the Small Business Act and how it applies to their operations.
- utilise the process of Quality Systems and Standardisation to manage their operations more effectively.
- work collectively as clusters to achieve general business improvement.

Among the participants present, the sectors are as follows:

SECTOR	NUMBER OF ENTREPRENEUR		
Garment Manufacturing	12		
Services	6		
Food Processing	6		
Wood	7		
Handicraft	12		

Those MSE's present gave an indication that they are willing to follow through on the certification processes for MSE, since it provides a means for them to advance their business development. Though the programme was geared more for exportoriented small businesses only about one third of those present were exportoriented. The GNBS will work with these MSEs for the next six months by providing the technical support to implement the requirements of the standard.

Once the management system is implemented, the GNBS will certify the products for which the requisite standards are available, if not, then the GNBS will certify the management system, e.g. those involved in services.

4.3 External Training Programme

During the year the following training was provided to Industries:

4.3.1 ISO 9001:2000 Seminar: Understanding the Concepts and completing the process

This one day programme provided guidelines for understanding, documenting and implementing a quality management system meeting the requirements of ISO 9001:2000. It provided the participants with the skills to:

- (a) understand the details of ISO 9001, its purpose and benefits;
- (b) understand the requirements of the ISO 9001 standard;
- (c) understand the role management is required to play, to guarantee success of the system;
- (d) learn about the role that documentation plays in a Quality Management System;
- (e) establish a plan for implementing a quality management system;
- (f) understand the Quality management principles upon which the standard is based; and
- (g) understand the requirements for Registration of the quality management system.

This seminar targeted senior managers, supervisors, and staff involved in quality control and inspection and was held on Friday December 03, 2004 from 09:00 h-16:30 h at Emba-Sea Courtyard, 6 Pere Street Kitty, Georgetown.

The programme was facilitated by Mr. Orett Campbell and Ms. Margaret Weston. A total of 65 persons from some 13 companies attended the programme and gave very high commendations for the seminar. As a result, the GNBS had received enquires about helping the companies to implement the ISO 9001:2000 quality management system. The managers indicated that an ISO quality management system has a lot to offer their companies even if they don't seek certification. This means that with increased request coming from companies, the GNBS will have to be even more prepared to deal with these requests by providing the required resources.

4.3.2 ISO 9000 Registered Auditor/Lead Auditor

The GNBS, in Collaboration with Caribbean HRD Programme for Economic Competitiveness (CPEC), trained 10 persons in ISO 9001 Lead Auditor training from December 06-10, 2004 in the Training Room of the GNBS. Four persons came from the GNBS and six from the private sector.

The programme was facilitated by Rob Sibley who currently serves as a Senior Management Consultant at Global Quality Institute, an organization engaged in providing world class ISO 9001, ISO/TS 16949, ISO 14001 and OHSAS 18001 education, consulting, and software services.

This intensive, five-day course presented an in-depth analysis of the audit cycle, the ISO 9001:2000 standard and its application. World-class training techniques included state of the art audio-visual presentations, workshops, interactive lectures, quizzes and team-based exercises. Each evening, team-based assignments supplement lecture and text material. Students learned and developed auditor skills to function as first party, second party and third party auditors. Participants were expected to pass a two-hour written examination to satisfy the RAB requirements for the training portion of Quality Systems Provisional Auditor, Auditor and Lead Auditor qualifications. The schedule for the programme was Monday through Thursday; class duration was from 8:30 h to 16:30 h; Friday's schedule ran from 8:30 h. to 12:30 h.

This course was facilitated by Premier Quality Services Limited. It is accredited in the Registrar Accreditation Board (RAB) accreditation Program, and meets the training portion of the requirements for certification of Quality Systems provisional Auditor, Quality Systems Auditors and Quality Systems Lead Auditors.

- 4.3.3 A training session on the topic "Standards: A tool for competitiveness in business" was held for Management and Supervisory personnel of Gafsons Industries Land of Cannan Complex. This session was well received by participants and the GNBS was asked to make other presentations in the new year.
- 4.3.4 A presentation on the "Guyana Standard GYS 2:10 Labelling of equipment, parts and containers of Ozone depleting substance," was made to Officers of the Customs Department on behalf of the National Ozone Action Committee.

5.0 LABORATORY CERTIFICATION PROGRAMME

The Laboratory Certification Programme of the Guyana National Bureau of Standards (GNBS) is involved in promoting the implementation and maintenance of a laboratory management system in testing laboratories. This is to ensure the issue of accurate, reliable and consistent test results.

Laboratories registered to the Laboratory Certification Programme were involved in updating their quality systems to meet the requirements of the GYS 170:2003 standard, "General requirements for the operation of a laboratory."

It is also a requirement for laboratories to develop technical manuals which clearly document the tests done at the laboratory.

Attaining the requirements of the standard, laboratories are certified by the GNBS and this certification is renewed annually.

During the certification period, surveillance visits are periodically conducted to ensure that the laboratory system is maintained. During this process, the laboratory is expected to address any non-conformances highlighted during the visit within a reasonable time.

The activities of the programme are focused on improving the quality of laboratory services available in Guyana, and in effect, protect consumers.

5.1 Technical assistance to laboratories – Implementation of the ISO/IEC 17025 standard

Accreditation of testing laboratories in Guyana to the ISO/IEC 17025 standard, "General requirements for the competence of testing and calibration laboratories" will allow testing laboratories to be recognized as being competent in the specific testing areas nationally, regionally and internationally.

Accreditation is an effective marketing tool for testing, calibration and measurement organizations and is a highly reliable indicator of technical competence. Products tested or services offered by accredited laboratories will be recognized. This achievement will reduce barriers to trade and increase economic growth and development.

5.1.1 IAST, FDD and GRDB Laboratories

The proposed plan to have the Institute of Applied Science and Technology (IAST) and the Government Analyst, Food and Drugs Department (FDD) laboratories accredited for specified tests to support the Seafood industry was not realized. The main challenges experienced by these laboratories included unreliable supply of regents, inadequate laboratory facilities, inefficient supply of

electricity and water and limited samples for testing. One review of the quality manual and quality system procedures was completed by GNBS. The Laboratory is currently correcting the quality system documentation.

These, among other issues, prevented the laboratories from developing and implementing a quality system meeting the requirements of the ISO/IEC 17025 standard.

Efforts to seek assistance from the Private Sector and responsible Ministries were not fruitful. The current status is that the FDD has to submit the final draft of the Quality Manual and quality system procedures to the GNBS for review, after which, a pre-assessment audit will be conducted. The IAST has corrected 50% of its quality system documentation which has to be submitted to the GNBS for review.

In addition, the Guyana Rice Development Board (GRDB) has completed its quality system documentation to the ISO/IEC 17025 standard. The laboratory has to commence implementation of the quality system to generate records. Two reviews of the quality system documentation were completed.

5.1.2 Banks DIH Coco Cola laboratory

A gap analysis was conducted at the Banks DIH Coca Cola laboratory to the ISO/IEC 17025 standard. This laboratory has to align its established quality system to the ISO/IEC 17025 standard. The laboratory has records of implementing at least 90% of the requirements of the ISO/IEC 17025 standard in addition to the other international requirements followed.

5.1.3 GWI Laboratory

A gap analysis and technical assistance session was also conducted at Guyana Water Inc (GWI). This laboratory has to develop a quality system, meeting the requirements of the standard. The laboratory personnel who were assigned the responsibility to develop this system were not trained and requested guidance from the GNBS.

5.1.4 Other Laboratories

The following laboratories have not commenced work on developing their systems to the ISO/IEC 17025 standard due to constraints experienced: Sterling Products Limited, New Guyana Pharmaceutical Corporation, National Agricultural Research Institute and Guyana Geology and Mines Commission. The Guyana Sugar Corporation indicated that the laboratory system was being developed. However, it was indicated that the GNBS will be informed when the documentation is ready for review.

No additional work on the documentation of the quality system at the GNBS gold and metrology testing laboratories was conducted during the year, due to the unavailability of personnel and adequate laboratory resources. This would be effected early in the new year.

It was observed that test results from laboratories were generally accepted even though there was lack of management commitment in ensuring that the laboratory system was developed.

Since there is no accredited metrology laboratory in Guyana, there will be difficulties in implementing some aspects of the ISO/IEC 17025 standard which relates to purchasing of laboratory services and supplies, traceable calibration services and laboratory infrastructure.

The GNBS is working to provide the necessary resources to its metrology laboratories in order to ensure that there is suitable laboratory environment/infrastructure, and traceable reference standards to meet the demands of industries.

Accreditation of the Scientific Metrology laboratory and the Gold Testing laboratory will provide evidence that these laboratories are competent to conduct calibration and testing services offered. As the National Standards Body, the services offered would be in keeping with national and/or international standards.

After the completion of the ISO/IEC 17025 training programme in April, 2003, a user group was established among the participants. The objective of the user group was to assist each participating laboratory in the documentation of the quality system documents to the ISO/IEC 17025 standard. At the meetings held in 2003, laboratories had developed draft documents with which to work. It was decided that laboratories will work independently to develop their laboratory system in consultation with the GNBS. To date, only four of the thirteen laboratories have documented their quality system as outlined in 5.1 of this report. The remaining laboratories have either decided to register for National Certification or have not commenced documentation due to challenges expressed. These include the limited resources available at the laboratory and lack of management commitment.

5.2 Training of laboratory personnel

A training programme on Internal auditing of the laboratory management system meeting the requirements of the GYS 170:2003 standard was held on July 15-16, 2004 in the Training Room of the GNBS.

Thirty-two participants from seventeen (17) medical laboratories and five non-medical laboratories attended the training programme. An evaluation of the training programme indicated the following:

- 1. All participants felt that internal audits were important and had a general knowledge of its importance.
- 2. Twelve participants were involved in internal audits of their laboratory systems prior to attending the training programme.
- 3. Participants felt that internal audits could improve their laboratory systems.
- 4. All participants expressed a willingness to improve their laboratory systems and detect problems for the purpose of continuous improvement.

Participants showed an eagerness to learn the different stages for preparing and conducting internal audits.

The training programme was fulfilling and a learning experience. The objectives of the training programme were achieved and all participants benefited. The training programme provided participants with the necessary tools required to conduct an internal audit of their laboratory system. This would assist in the implementation and maintenance of the laboratory quality system.

Participants were provided with sufficient knowledge to:

- (a) carry out an effective internal audit;
- (b) properly plan for the audit and prepare checklist;
- (c) conduct interviews and examine records;
- (d) write nonconformity statements;
- (e) assess the significance of the findings and prepare audit reports; and
- (f) understand how the corrective action and feedback loop of the audit process works as a tool for continuous improvement.
- **5.2.1** No new application was received during 2004. However, two application forms are expected from two laboratories interested in the Laboratory Certification.
- 5.3 Technical Assistance to Laboratories Implementation of the National Laboratory Standard (GYS 170:2003)

Three laboratories have completed 90% of the quality system documentation to the GYS 170:2003 standard. The manuals were reviewed by the GNBS and the laboratories are carrying out final corrections to their manuals. These laboratories are Guyana Medical Laboratories, Central Medical Laboratory – GPHC and Georgetown Medical Centre – Prashad's Hospital.

In addition, another five medical laboratories have submitted their quality manuals to the GNBS for review. These are Sigma Labs, Images Diagnostic Centre, West Demerara Regional Hospital, Suddie Public Hospital and Linden Hospital Complex.

Laboratories which include Eureka Medical Laboratory, Ogle Diagnostic Centre, St. Joseph Mercy Hospital, Medical Arts Centre, Multi-Tec Reference laboratories, Davis Memorial Hospital and Woodlands Hospital are expected to submit the first draft of their quality manuals by March 2005 based on the scheduled dates of completion.

Fifteen quality manuals and fifty-seven technical manuals were submitted from clinical laboratories for review. Three technical manuals were submitted from nonmedical laboratories. There has been a significant improvement in the quality of most quality manuals submitted for review. This may be as a result of the training provided in October 2003.

However, several factors delayed the correction and completion of the manuals by the laboratories within an acceptable time frame. These factors included limited time dedicated to develop manuals due to the heavy workload among their staff, and management commitment.

The laboratory personnel generally expressed a willingness to have their respective laboratories certified. However, management commitment was not always as expected.

The enforcement of this standard as a basic requirement for laboratories to operate will gain more support and commitment from top management of laboratories since laboratories will have to conform to the basic requirements in order to operate. Support to this approach in 2005 will, in effect, gain more commitment from top management by ensuring that the laboratories they manage are certified. Mechanisms would need to be implemented to deter the prevalence of laboratories operating without national standards.

5.4 Pre-assessment audit

No pre-assessment audit was conducted since no additional laboratory had met the requirements for certification. A new initiative of providing gap analysis at laboratories was explored. Gap analyses were conducted at thirteen laboratories to determine the gap between the laboratory's quality system to the revised standard, GYS 170:2003. This process had allowed laboratories to identify the areas of the quality system to be developed. The laboratories are currently developing their laboratory systems in accordance with an action plan developed by the laboratory.

5.5 Certification of laboratories

No laboratory was certified for 2004. However, Georgetown Medical Centre should be ready for a pre-assessment audit by March 2005. The latter six months of 2004 had seen an increase in the quality and technical manuals submitted to the GNBS for review. The GNBS voiced its disappointment at several fora and

proposed to stop offering the laboratory certification programme due to the lack of commitment exhibited by top management of the laboratories. This had resulted in an increased commitment and recognition of the Certification Programme. Laboratories insisted that the GNBS should continue to work with them in order to improve laboratory quality in Guyana.

In order to encourage more laboratories to be certified, the GNBS had reviewed the requirements for laboratory certification. The criteria for assessment of laboratories were fixed at three levels (Level I, Level II and Level III) where the laboratory would be granted certification as it addresses specific requirements for each level of certification. Selected requirements from the GYS 170:2003 standard would be used to assess laboratories from 2005. Laboratories saw this as an opportunity to meet the full requirements (Level III) for certification gradually.

5.6 Maintenance of quality systems in Laboratories

5.6.1 Five of the eight laboratories granted certification by the GNBS have maintained their systems. The five laboratories are Guyana Medical Laboratories, Central Medical Laboratory, Sigma Labs, Eureka Medical Laboratory and St. Joseph Mercy Hospital.

Guyana Responsible Parenthood Association, Food and Drugs and IAST were unable to maintain the requirements for certification. Manuals for these laboratories are being reviewed by the GNBS and Laboratories are in preparation for their renewal audits.

5.6.2 Four renewal audits were conducted at certified laboratories to ensure that there was adequate evidence to demonstrate that the laboratory system was maintained. Renewals were granted to St. Joseph, Eureka, Sigma and Guyana Medical Laboratories.

Fifteen surveillance visits were conducted at the five certified laboratories to ascertain whether they were consistently maintaining the requirements for certification. No major nonconformances were identified at the laboratories except for the laboratories where renewals were not granted.

The absence of an accredited metrology laboratory in Guyana to provide traceability and calibration services in volume, temperature, mass and length continues to affect the accuracy of measuring instruments used in laboratories. External metrology services are very expensive for laboratories to offset.

5.6.3 The absence of a National Proficiency Testing (PT) scheme in Guyana or a Reference Laboratory continues to affect adequate monitoring of the laboratory's competence with respect to the test results issued for tests within the scope of certification.

PT schemes that are available internationally are quite expensive for all local laboratories to subscribe. The Ministry of Health commenced coordination of a Proficiency Testing (PT) Programme with public and private laboratories. This programme allowed laboratories to participate in the Medical Evaluation Programme at a reduced cost. Two sets of samples were sent to the participating laboratories. However, only one evaluation of their performances was sent by the PT provider.

An evaluation of the PT performance was not done by the Ministry of Health. However, the GNBS provided some guidance to the laboratories to evaluate their performances.

5.6.4 The staff complement at all certified laboratories except GRPA remained stable. This stability resulted in the laboratory systems remaining consistently in conformance to the requirements of the standard. It was observed that the Quality Managers were not allocated adequate time to ensure the quality system was effectively maintained and be involved in continuous improvement.

The training provided to laboratory personnel in internal Auditing is expected to improve the quality of internal audits and management review conducted at laboratories.

As the GNBS continues to promote laboratory quality in Guyana, enforcing measures such as canceling, withdrawing and suspending of certification will have to be implemented to ensure that laboratories always remain in conformance to the requirements of the standard.

The availability of post-graduate training programmes and continuing education programmes in quality management and technical areas of testing is limited in Guyana. There is need for improvement in these areas to ensure that staff competencies are maintained.

5.7 Participation in the EU-Project: Strengthening of medical laboratory Services in the Caribbean

The EU Project is focusing at improving the quality of services provided by National and Regional medical laboratories to improve patient management disease precaution, and control. Improved health status of a country reduces disease outbreaks that threaten the tourist industry, a major source of economic growth, employment and foreign currency.

A Standards Advisory Committee meeting was held in April 2004 in Grenada and the objectives of the meeting were:

- (1) To adopt a draft guidance document which will facilitate the implementation of the ISO 15189 standard, Medical Laboratories – Particular requirements for competence in regional medical laboratories. This document will also function as a guide for assessment of compliance with the ISO 15189 standard.
- (2) To reflect the way forward, strategies to advocate the use of the guidelines in the region and creation of a Caribbean Laboratory Accreditation Service: Advisory Accreditation and/or Certification Body.

With reference to objective I, comments from the Caribbean and Cariforum countries were considered. The final guidance document was completed and will be implemented in laboratories as a guide to the ISO 15189 standard. The final document has not been published to date. The ISO 15189 standard will be presented at the next COTED meeting to be adopted as a Regional Standard.

With reference to objective 2, several options for the use of the guidelines were presented. The moderator outlined a three stage model to facilitate gradual implementation of the standard to attain the status of Accreditation.

The three stage model includes (1) Registration and self assessment phase where a provisional licence will be granted, (2) Phased development plan where the National Coordinators will assist laboratories in the implementation of the standard, (3) Assessment and Accreditation where the Caribbean Laboratory Accreditation Service will audit the laboratories and grant Accreditation as required.

The National Coordinators were selected from the Ministry of Health. The GNBS had no representative on the ongoing training programme and would therefore not be in a position to assist laboratories in the implementation of the ISO 15189 standard.

To date, the implementation of the ISO 15189 standard in laboratories has not commenced. The focus is to have all laboratories meet the requirements of the GYS 170:2003 standard.

The proposal to adopt the ISO 15189 standard as a national standard was submitted by the Ministry of Health. This proposal was acknowledged and submitted to the Standardisation Department for processing.

The National Laboratory Advisory Committee chaired by the Minister of Health met during the year. At these meetings status reports on different aspects of the EU Project were presented and discussed. The progress made at other committees and actions taken were also outlined.

A Strategic Planning workshop was held in June 2004 at Hotel Tower where a draft Strategic Plan for the implementation of the EU project in Guyana was developed. Stakeholders met and discussed the areas to be addressed to facilitate the implementation of the project. Six objectives were defined, of which, committees were assigned to address. The objectives included, the establishing of a network structure for laboratories and stakeholders in Guyana, upgrading of the Medical Technology programme, attracting and retaining competent staff and establishing and implementing an efficient and effective procurement system. Dr. Dennison Davis from the Ministry of Health (MOH) was assigned coordinator of the committee to ensure that the objectives were addressed.

5.8 Coordination of Proficiency Testing for Laboratories in Guyana

The GNBS was unsuccessful in sourcing a PT provider for Food Testing Laboratories especially for Seafoods. The MOH has commenced a PT scheme for medical laboratories. The programme is voluntary and it is conducted through the Medical Evaluation Programme. The public laboratories and some private laboratories are participating in the programme.

Three interlaboratory comparisons were conducted among six medical laboratories in the area of Clinical Chemistry. An analysis of the results showed that there was a wide variance among laboratories with respect to the test results issued. This indicated that laboratories were issuing results which varied, despite the methods outlined.

These results indicated that there is need for improvement in the service provided by certified laboratories and moreso, uncertified laboratories.

The availability of equipment maintenance services provided to the laboratories is limited and cannot be verified. Staff competencies are also not evaluated in laboratories due to lack of resources. There is a need for evaluation of the technical performance of laboratories which the MOH should provide to medical laboratories. However, the PT scheme should assist in evaluating the performance of medical laboratories.

5.9 National Laboratory Quality Committee

National Laboratory Quality Committee meetings were held at the GNBS. The Committee members on the clinical committee meetings who represented an average of fifteen laboratories attended meetings regularly.

No meeting was held for the non-medical laboratories. The meetings were used as a forum to highlight problems and discuss probable solutions. Educational sessions were included in the meeting agenda as a forum of tips for continuing improvement in the laboratory operations. Some of the topics covered included

laboratory safety instrument calibration and maintenance, and measurement traceability.

Common constraints that continued to affect laboratory personnel included limited time to develop quality and technical manuals, unavailability to a computer to type manuals, lack of commitment exhibited by some top management and inadequate resources to execute their duties.

Quarterly progress checks of the laboratory's status in developing quality and technical manuals were provided at meetings. There has been an increase in the number of laboratories deligently working on their manuals when compared with 2003.

The Laboratory Certification Programme is expected to show positive results in 2005. The programme has been recognized nationally and supported. However, more promotional activities will be done in 2005 to ensure that users of laboratories are educated on the implication of using laboratories that are not certified.

6.0 PRODUCT CERTIFICATION

The product certification programme of the Guyana National Bureau of Standards serves to promote, implement and monitor certification systems in industries to provide the assurance that locally-manufactured products conform to the requirements specified in the relevant national standards.

Before certification can take its course, the following infrastructure must be in place:

- Relevant Guyana Standard for the product.
- Testing facilities for the product in accordance with the standard.
- Adequate quality control system in the manufacturing process.

The major activities of the programme are:-

- (1) Granting permission through the issue of a certificate to manufacturers to mark their products with the Standards Mark, once having satisfied the requirements of the relevant standard and the certification scheme; and
- (2) Conducting regular surveillance to ensure that certified manufacturers continue to conform to the requirements of the relevant standard and the certification scheme.

This report briefly summarizes the activities, accomplishments and challenges experienced for the year 2004 for the product certification programme of the GNBS.

6.1 Maintenance of Standards Mark permits

Surveillance and renewal audits were conducted as scheduled. The following table summarises the number of audits conducted for the clients on the certification scheme.

NAME OF CLIENT	PRODUCT NAME	NO. OF SURVEILLANCE AUDITS CONDUCTED	NO. OF RENEWAL AUDITS CONDUCTED
Kings Jewellery World	Gold Jewellery	1	2
Seeram's Jewellery	**	1	2
Steve's Jewellery	"	1	1
DeAbreau's Creations	"	2	1
Plastic Products Limited	PVC Pipes	2	1
Guyana Thermoplastics Limited	"	2	1

Two renewal audits were conducted at King's Jewellery World and Seeram's Jewellery, respectively, because none was conducted in the year 2003. On the other hand, surveillance audits were conducted for some clients due to the fact that negligible deficiencies were highlighted during previous audits.

To date, all audits have been completed as scheduled. Originally, seven clients were targeted for monitoring at the beginning of 2004. Unfortunately, one had dropped out of the scheme due to unforeseen circumstances and failure to pay three successive renewal certification fees (Nikos Jewellery).

Most clients on the scheme were addressing the recommendations made during these audits and as such there were definitely continued improvement in the clients' operations. Guyana Thermoplastics Limited had not been addressing recommendations but promised to do so for the new year.

No legitimate complaint had been received regarding certified products for the above clients. Monitoring activities have therefore been successful, nevertheless, a more intense surveillance audit programme needs to be planned taking into consideration, open market sampling where a wider cross section of the products manufactured by a particular certified client would be selected for independent testing.

The fact that independent testing facilitates for PVC pipes are not available has caused all decisions to be made based on tests conducted on the manufacturer's premises. Due to the unavailability of testing facilities and relevant product standards for the local manufacturing industries, certification was not attempted for products. Also, the programme is voluntary; hence, some manufacturers are not recognising the need for certification.

All manufacturers have shown commitment to meet the requirements of the relevant product standards. However, the issues of safety in the manufacturing operation and calibration of equipment still need to be addressed for some clients. These were recorded in the audit reports and submitted to clients. The GNBS is currently developing its capability to do so.

6.2 Granting of Permits to new clients

Under this objective, the following activities were carried out:

(i) Jhonny's and Alim's Jewellery have been awarded permits to mark their gold jewellery with the Standards Mark after satisfying the requirements of GYS 50: (Specification for gold articles) and the Product Certification Scheme;

- (ii) Preliminary audits were conducted at Gopaul's and Correia's Jewelleries as part of the certification process for gold jewellery;
- (iii) A certification audit was conducted at Gafsons Industries as part of the certification process for steel nails;
- (iv) Technical assistance was provided to Lawrence Lowe's Jewellery, Correia's Jewellery, Gopaul's Jewellery and Gafsons Industries to enlighten these clients on the requirements of GYS 50: Specification for gold articles and GYS 214: Specification for steel nails, respectively. Assistance was also provided to Alim's Jewellery and Jhonny's Jewellery; and
- (v) Some eight enquiries were received regarding the certification of gold jewellery. All the enquires were addressed and as a result, clients promised to apply for certification. Gafsons industries also requested certification of wire mesh, zinc sheets and BRC.

Although, only two clients have been certified for the year, Gopaul's Jewellery, Correia's Jewellery, Lawerence Lowe's Jewellery and Gafsons Industries had completed the certification process. However, certain recommendations made during audits could not have been addressed in a timely manner and as such, these clients requested a deferral of the certification process until early 2005. They gave the assurance that they would remain on the scheme, hence, the number of clients on the scheme is definitely expected to improve in the coming year. Also, since Gafsons Industries is requesting certification for zinc sheets, wire mesh and BRCs, developing the national standards will enable GNBS to undertake the certification process which would create a positive impact on the programme, providing testing facilities are available.

At the moment, the scheme is voluntary and it is focusing on jewellers. Receiving applications for new products would require the availability of credible testing facilities and the relevant product standard. In the new year, applications would be processed for which the infrastructure exists. However, the GNBS would prepare itself to undertake new products through the training of staff or soliciting technical experts for the products in question.

6.3 Jewellery Workshops

Four jewellery workshops were conducted in Georgetown, one in Anna Regina and one in New Amsterdam. The workshops covered the requirements for marking, manufacturing, alloying and testing gold jewellery as stipulated in the standard. The Product Certification Scheme was also promoted. As such, the procedure and requirements for product certification were explained. Six

application forms were issued to jewellers who expressed an interest in the certification scheme.

On evaluation, the number of workshops conducted exceeded the number that was planned. During these workshops, the opportunity to learn the standard method of marking, alloying, manufacturing and testing was most welcomed by the jewellers. It was also observed that for the workshops conducted in Georgetown, attendance was very poor; only one-third of the total members invited, attended these sessions. The responses, however, for Regions 2 and 6 were very good.

The idea of jewellery certification was well acknowledged and many jewellers promised to apply to GNBS for certification after they have implemented the standard.

The workshops could have been more effective if immediate follow-up/visits were effected for those jewellers who attended the sessions. This approach would be used in the new year. Nevertheless, these workshops were most welcomed by all participants, as they are now more knowledgeable on the requirements of the Guyana Standards for gold articles. This has also resulted in more jewellers having an interest in certification.

7.0 CONFORMITY ASSESSMENT

Guyana is presently negotiating trade agreements on several fronts e.g. World Trade Organisation (WTO), Free Trade Areas of the Americas (FTAA), Caricom Single Market and Economy (CSME) and other bilateral agreements with individual countries. Defined in all of these agreements are requirements for conformity assessment which need to be addressed before Guyana can start to implement these agreements and benefit from trade within these agreements.

Based on these agreements, the conformity assessment programme of GNBS was focused on the goal of "establishing an internationally recognized national Conformity Assessment System in Guyana". The objectives that were established to achieve this goal are:

- (a) To design and implement a structured national conformity assessment system;
- (b) To collaborate with other agencies involved in conformity assessment activities in order to implement a quality management system meeting international standards; and
- (c) To train in the areas of conformity assessment activities.

7.1 National Committee on Conformity Assessment (NCCA)

7.1.1 The NCCA was launched with the terms of reference for "Development of an internationally-recognised system for Conformity Assessment, that will improve the quality of life for all Guyanese and enhance economic development through the improvement of export quality, monitoring of local and imported products, monitoring regulatory requirements and providing advice to government and private sectors on issues relating to conformity assessment".

The decision-making process involves the Sector Committees, which consists of Inspection, Testing and Certifying bodies, producers/exporters and research interest, discussing and identifying issues relating to competitiveness within the sector and making recommendations to the NCCA. The NCCA then discusses the issues and recommendations of the Sector Committees, and compile into a report to be presented to the Parliamentary Committee for Trade and Economic Development.

7.1.2 The NCCA met four (4) times (once every quarter) during the year. However, the activities of the NCCA were supplemented by eight Sub-Committees for the following sectors: Rice, Food, Seafoods and Edible meat, Jewellery, Tourism, Construction and Furniture.

The terms of reference for the Sector Committees focused on "Ensuring that the conformity assessment activities and products of the Sector meet international requirements for quality.

7.1.3 The Sub-Committees met more frequently and provided valuable inputs, which were discussed at the NCCA meetings. They were able to conduct a gap analysis of the present status of conformity assessment activities within their specified sectors against what is recommended by these trade agreements, and made recommendations on what needs to be done to address the gap identified. These findings were summarized and documented in a report from the NCCA which would be circulated and discussed with relevant policy makers.

7.2 Collaboration with other agencies involved in Conformity Assessment activities

7.2.1 Guyana Tourism Authority

Discussions were held with the Product Development Officer of the Guyana Tourism Authority (GTA) on the implementation of a certification system for the three (3) standards developed by the GNBS.

The requirements of Guide 65 were outlined to him and discussions were held on implementing a certification system taking into consideration the present status of the GTA and the Tourism Sector of Guyana.

Discussions were also held with the Guyana Trade and Investment support (USAID) project for support in implementing this idea.

7.2.2 Inspection agencies

On a directive from the NCCA, the GNBS met with eleven (11) agencies to discuss the implementation of the ISO 17020 standard in their operations. Following up from this discussion, a plan of action was established, discussed and partially implemented. Three (3) training sessions were held and the GNBS and GRDB have commenced the development of their quality manuals. The Food and Drugs Department, EPA and GTA have also promised to commence this process.

7.3 Awareness of Conformity Assessment activities

There has been an increased awareness of conformity assessment activities in the last year mainly due to the activities of the NCCA and sub-committees. Efforts were made to disseminate information to the relevant persons as well as training on the various principles that govern these activities.

There is also an increased awareness of the importance of these activities at the GNBS and this is done through various means of information dissemination.

7.4 Comments

7.4.1 Conformity Assessment results

Recently, Guyana had seen an upsurge in regulatory bodies from foreign countries questioning the results of conformity assessment activities, and they requested to audit the systems that produced those results. This had resulted in these regulatory bodies making demands for improvement on the present system, requesting that they have to audit and approve other systems annually or ask that another agency takes on the function as is the case with export of rice to Jamaica.

7.4.2 Future trade

Guyanese need to acquaint themselves with the changes that are taking place in the world and prepare for trade in the future by conforming to the requirements for conformity assessment that are outlined in the various trade agreements that have been signed or are being negotiated by the Government.

7.4.3 Private Sector involvement

There is the need for more involvement of the private sector in these deliberations for it is the private sector that will benefit the most through increased market access. They need to clearly understand what part they need to play in this whole process.

7.4.4 Agency participation

There is a reluctancy of some agencies to get on board with this process, especially, those whose results are critical for the economic development of Guyana. They are citing different excuses such as:

- (a) Lack of resources;
- (b) Legislative deficiencies; .
- (c) Lack of cooperation between Government agencies; and
- (d) Not sure of future development (implementation of FAO food safety project recommendations).

as reasons for not wanting to participate in activities related to implementing a quality management system meeting international requirements in their operations.

7.4.5 Metrology services

There is the need for the Metrology services provided by GNBS to be upgraded so as to be able to service the equipment used for conformity assessment activities effectively. The areas of mass and volume are adequate, but there is the need to address Temperature, Pressure and Electricity.

7.5 Evaluation

7.5.1 Importance of Conformity Assessment activities

The importance of conformity assessment activities as a pre-requisite for conducting trade successfully in a global marketplace is increasingly being understood by the relevant stakeholders.

However, the pace in which issues that are related to these activities are being addressed need to quicken, for the deadlines for the implementation of these trade agreements are already set e.g CSME as of January 2005, and Guyana would not be properly prepared.

7.5.2 Role of Government Agencies

The Government agencies need to be more proactive and take the lead role as it relates to development in the various industrial sectors to ensure that the required assurance is provided to the marketplace. This is because it is unlikely that private sector will take on these responsibilities due to a lack of sufficient market for such service. If this assurance whether certification, inspection and laboratory test results cannot be addressed, it would mean that local manufacturers will have a difficult time in accessing export markets or they would have to send their products overseas to be tested at a high cost.

7.6 Other activities

7.6.1 Standard for Sustainable Forest Management in Guyana

The GNBS is represented as part of the Environmental Chamber in the development of a standard for Sustainable Forest Management (SFM) for Guyana. This standard is presently in its third draft, which is undergoing the public consultation and peer review stage.

A proposal was submitted to, and approved by the National Standards Council (NSC) to have this standard approved as a Guyana National standard on its completion by the Working Group of Guyana National Initiative for Forest Certification (GNIFC). This working group is also preparing a guideline document that will facilitate easier implementation of this standard in forestry operations.

7.6.2 Training of Gafson's Staff

One training session was conducted for senior staff of Gafsons – Land of Cannan Complex on the topic "Standards – A tool for Business Development and Competitiveness". This was well received and the Management indicated that they would be interested in hosting sessions of a similar nature.

7.6.3 Training of Custom's Staff

A training session was done on the Guyana Standard, "GYS 9-10: 2002, Specification for labelling of commodities Part 10: Labelling of equipment, items and parts containing ozone depleting substances," for the National Ozone Action Unit, to some 40 staff members of the Customs Department. A complimentary copy of the standard was given to the information unit of the Customs Department.

7.6.4 Training of Inspection Agencies

Three training sessions were held for inspection agencies covering clauses 1-9 of the ISO 17020: 1999 standard, "General criteria for the operations of various types of bodies performing inspections". Agencies present were GNBS, GRDB, Food and Drugs Department, EPA and GFC.

7.6.5 GNBS Quality Management System

A review of the documentation addressing the requirements of the ISO 9001 standard was completed and placed on the internet for Heads of Department and Programme Officers to review. This would be reviewed at a formal training on these documents, after which the comments from GNBS staff would be incorporated and the documents would be issued for implementation.

The technical procedures related to the service delivery process of GNBS have been drafted. These would be reviewed by the responsible department and issued for implementation with the respective departments.

7.6.6 Collaboration/interaction with other Government and Funding Agencies

The GNBS participated in discussions within various grouping hosted by the Ministry of Foreign Trade and International Cooperation (MFTIC). They are:

(a) National Technical Working Group (N-TWG)

Discussions were held on the various trade agreements being negotiated by Guyana, and the GNBS was part of sub-groups which focussed on Market-Access and Procurement.

(b) Rice Export

This group discussed problems related to the production and export of rice. Recommendations and solutions were discussed and assigned to various agencies/personnel to be addressed.

(c) Preparation for COTED meeting

Briefing on standards related matters to be discussed at the COTED meeting and follow-up that is required to have been done according to the previous minutes of COTED meeting is done by GNBS representative. The Minister is advised on what should be Guyana's position as it relates to these matters.

7.6.7 Public Service Modernization Programme

Senior Management staff from GNBS were part of a discussion with members from the Public Service Modernization Programme on the present operations of GNBS and what the projections are for the next 5 years. This was all a part of the phase III of the project.

7.6.8 Implementation of WTO Agreement

Management of GNBS had discussions with a consultant from IADB/CARICOM WTO Technical Assistance consultancy project, on the status of implementation of WTO Agreements in Guyana. This discussion was primarily focused on the requirements of the TBT agreements that relates to Technical regulations and conformity assessment. Areas for possible assistance were identified.

7.6.9 Assistance to GNBS

Management of GNBS met with a team from IADB and held discussions on possible areas for which the IADB can provide funding under a project focused on increasing the competitiveness of companies in Guyana. Areas for possible assistance to the GNBS, which can produce increased competitiveness for private sector in Guyana was also highlighted. These ideas were documented and passed on to the team, which they are expected to incorporate in a project document to be submitted to the Government of Guyana.

7.6.10 CARANA Project

Management of GNBS was involved in discussions with a team from USAID on the success of the past project (2000-2004) managed by Chemonics and what the focus for the new project (2004-2008) Guyana Trade and Investment Support should be. The new project has already commenced and GNBS met with the

management of CARANA to discuss possible areas where the project can make an impact.

7.6.11 EMPRETEC Project

The GNBS participated in a workshop/discussion hosted by EMPRETEC on, "Creating Sustainable business linkages." Coming out of this event were recommendations that are valuable for the development of the competitiveness of SME's in Guyana.

8.0 COMMUNICATION

The Communication Division of the GNBS faced another challenging, yet rewarding year. In spite of the financial setbacks, it was able to accomplish its goals to provide support for the technical departments, promote GNBS activities and disseminate information to industry, regulatory bodies, Government agencies and members of the public. In the execution of its duties, a variety of communication strategies and approaches were used. The Division was also able to organize GNBS participation in exhibitions and national events.

8.1 Programme Support

The Communication Division provided vital support to the staff of the technical departments, thus ensuring that key stakeholders (industry, manufacturers, other regulatory bodies, priority sectors and consumers generally) are informed about planned GNBS activities such as symposia, public consultations, seminars, workshops, etc.

The strategy of programme support provided communication inputs into all programmes and activities of the Bureau and fostered a closer working relationship between departments.

The major tasks undertaken and successfully accomplished were the preparation and printing of (i) four thousand factsheets titled "Purchasing tips for consumers, (ii) four hundred factsheets titled "Standards and the Manufacturer", (iii) posters supplying information on Weighing and Measuring tips for consumers, benefits of laboratory certification, what standards do for us, the standards development process and the benefits of laboratory certification.

The Division also arranged nine press briefings, symposia, chaired opening and closing ceremonies for training courses, organized news interviews, responded to correspondence by members of the public seeking redress on consumer matters, answering letters written to the editor on consumer matters such as metrication and dishonest weighing and measuring practices. Editing of standards, the Standards Information Bulletin and the Codex Newsletter were also undertaken.

Below, are collaborative communication activities which took place during the year 2004.

- (i) Meeting of furniture manufacturers.
- (ii) The GNBS/CPEC Furniture workshop.
- (iii) The special meeting held with GNBS Stakeholders on "The role and functions of GNBS".
- (iv) Launching ceremony for the Gold Testing Laboratory
- (v) Workshop entitled, "Auditing Quality Management Systems according to ISO 19011
- (vi) Leap Furniture Project.

- (vii) Standardisation Forum.
- (viii) Handing over of the meter test bench.
- (ix) Advanced Legal Metrology Training Course.
- (x) Symposium on the Role of standards in the Building and Construction Industry.
- (xi) National Building Code promotion meetings.
- (xii) Small Business Workshop.
- (xiii) Live television workshop on the Importance of Standards in the seafood sector.
- (xiv) Attending evaluation session with overseas Consultants on the performance of LEAP.
- (xv) Public consultation session on national and regional standards.
- (xvi) Opening of metrology laboratories and media tour.
- (xvii) Commissioning of GNBS mobile test truck.
- (xviii) ISO 9001:2000 seminar.

In the coming year, the concept of programme support would be further strengthened with each department including in its work programme, an objective based on communication inputs.

8.2 Promotional activities

In an effort to publicise activities under the various work programmes of the GNBS, the Communication Division coordinated and executed the following activities:

8.2.1 GNBS Newsletter

The newsletter was produced on a quarterly basis and captured the highlights of activities undertaken during the quarter. About two hundred and fifty copies were distributed each quarter to stakeholders such as Government Ministries, Regulatory Bodies, Sister Bureaus, Libraries, Non-Governmental bodies, Industries and other Government Agencies. Editions for three quarters have been completed and distributed while the fourth quarter edition would be available shortly. The newsletter is a useful means of updating GNBS stakeholders on its activities as it provides a front page feature article, Weights and Measures round up, standards update and other short articles outlining major activities within the quarter.

From time to time, verbal comments are received by the Division requesting additional information and updates on articles contained in the newsletter. However, the preparation process is sometimes delayed due to late receipt of articles.

8.2.2 World Consumer Rights Day activities

World Consumer Rights Day is commemorated annually on March 15 worldwide. The umbrella body, Consumer International, chose as its 2004 theme "Water is a Consumer Right." The Bureau whose key function is consumer protection, collaborated with the Ministry of Tourism, Industry and Commerce to execute the following activities:

(i) Ceremony and Mini-Exhibition

The Agencies under the Ministry of Tourism, Industry and Commerce held a ceremony and an exhibition on Water Street outside of the National Bank of Industry on March 15.

The Communication Division of the GNBS coordinated GNBS's participation during which standards depicting the theme were promoted. The opportunity was also sought to distribute metric factsheets and conversion charts to the public.

At the ceremony, the Director of the GNBS made a presentation on "Standardisation and the water sector", following which, passersby and invites viewed the mini exhibition. However, the late start which was due to snags encountered by the organizers put a damper on the proceedings. Some passersby took the opportunity to stop and seek information from the Bureau on the quality of potable water and its role if any, in the regulation of the water sector. For future success, such an event should receive more advertising and publicity to reap a greater measure of success.

(ii) World Consumer Rights (WCR) Day Activities in Regions # 6 and 7

The other activities of WCR Day were taken this year to Regions number 6 and 7. Two separate teams of persons spearheaded the programme. The Region 6 team comprised officials from the Public Utilities Commission, the Acting Permanent Secretary of the Ministry of Tourism, Industry and Commerce, other Ministry Personnel, Head of Information Services, GNBS and Senior Inspector of the Food and Drug Analyst Department. The team which visited Region #7 was spearheaded by the Honourable Minister of Tourism, Industry and Commerce and representatives from the above-mentioned organisations and Guyana Water Incorporated.

The two teams met with Officials from the Chamber of Commerce, hosted live television programmes, visited municipal markets to speak with vendors and consumers about consumer-related problems such as the quality of goods, redress procedures for consumer complaints and labelling malpractices.

The Region # 6 contingent visited Furniture factories in New Amsterdam and took note of the decline in the Industry, which according to manufacturers, was due to competition from smaller producers with less overhead costs.

The Region #7 team was afforded the opportunity of visiting Baganara Resort.

The idea of extending the activities to other Regions of Guyana was an attempt to have the participation of residents outside of Region #4. The consumers felt encouraged and were happy that they were given the opportunity to share their concerns.

8.2.3 Standardisation forum

Following the presentation of a viewpoint on the NCN radio on January 20, 2004 on the "Need for Standards Education" by Dr. Chatterpaul Ramcharran, the Institute of Distance and Continuing Education (IDCE) approached the GNBS concerning the institution of formal courses on standardization for workers in industry, Ministries, Regulatory bodies, tertiary level students etc. In response, GNBS prepared course materials and submitted to IDCE Director. To decide on the way forward, discussions were held following which a forum on Standardisation was jointly housed at the Ocean View Convention Centre in May of 2004. Presentations were delivered by Mr. Al Creighton of University of Guyana, Mrs. White-Nedd of the Ministry of Education, Mr. Somai of GNBS, Mr. Sankies of GAPE and Mr. Small of IDCE. About forty participants attended and during the feedback session, participants lauded the initiative, pledging their support and looked forward to the commencement of the course. Immediately after, letters were sent to CEO's seeking their support for enrollment of their employees. The response was not as heartening as was anticipated and the IDCE had proposed to have the course commencing in 2005. A better response is anticipated.

8.2.4 Promotional visits

In an effort to spread the message about the need for standards and quality in all spheres of the economy and to share information about the role and functions of the GNBS, the Communication Division paid a two-day visit to Region #6 during the period May 11-12, 2004.

The team also took the opportunity to (i) obtain feedback from shopkeepers, vendors, businessmen about the quality of services offered by its Region #6 staff,

(ii) listen to and provide solutions to some consumer problems, (iii) share information about new initiatives undertaken by GNBS, (iv) distribute fact sheets, brochures, etc. on consumer information, and (v) host a live TV call-in programme.

Valuable feedback was obtained when staff members of the Communication Division held informal interviews with store owners and media houses in New Amsterdam. From observations, efforts are made to comply with labelling requirements and to offer redress to consumers. In some instances, metric units were used to conduct business.

The Municipal market at New Amsterdam was also visited to observe practices with respect to labelling and Weights and Measures procedures. Vendors complained that consumers were requesting goods in imperial units and expressed frustration in this regard.

One important finding was the decline of the furniture industry in New Amsterdam which according to reports from manufacturers, was due to scaling down of their businesses to survive in the face of competition. Members of the team advised them to venture into new products rather than the traditional pieces that were produced. They promised to try the advice given to them.

With respect to the live television programme, callers were concerned about the poor quality electrical and electronic appliances sold in Guyana and Weights and Measures malpractices. The GNBS team outlined the strategies used by the organization to combat these problems and encouraged consumers to collaborate with GNBS more closely. Callers requested more frequent visits and live programmes.

The opportunity was also taken during this visit to conduct a lecture for the Senior Secondary School students of Berbice Educational Institute on the subject "Standards in Daily Life". Information about services offered by the Bureau, and requirements for careers in the field of standardisation was also shared with students. Information packages were distributed. Some students showed interest by making further enquires and requesting follow-up visits. They were also invited to visit the GNBS.

8.2.5 School Lectures

In its continued effort to educate the young minds on the subject of standards, staff of the Communication Division delivered a lecture to senior students and teachers of the Annandale Secondary School which addressed the following areas: (i) Role and Function of GNBS (ii) Importance and Benefits of Standards (iii) Standards in daily life and (iv) Careers in Standardisation. Students were enthusiastic about the subject and expressed an interest in the relationship of standards to trade. It is hoped that in the new year more visits to schools will be

possible as this is an excellent opportunity to educate young minds about standardization.

8.2.6 Information Dissemination

One of the main functions of the Division is information dissemination countrywide to provide stakeholders with the tools to make informed decisions regarding standards and the quality of goods.

The methods used take the form of consumer advisories, press releases, notices and special features such as "Standards Corner", and "Standards Advisory", live programmes and lectures. Some amount of feedback is received through the letters column in the newspapers or via telephone calls. Some persons also take the opportunity at exhibitions to congratulate the Bureau on the fine job it is doing.

However, due to financial shortfalls, the radio programme continued to be off the air and the number of live television programmes was reduced. The department hopes to recommence the radio broadcast early in 2005. Statistics on the above activities are shown in the Table below.

No.	Name of Activity	Year 2003	Year 2004
1	Number of Press Releases issued	20	24
2	Number of Edition of "Standards Advisory"	16	44
3	Number of Editions of "Standards Corner"	15	23
4	Number of Notices published	27	39
5	Number of Press Briefings held	4	9
6	Number of School Lectures conducted	6	3
7	Number of live television/radio programmes	-	3

With respect to Regional visits, school lectures and live television programmes, due to budget cutbacks, it was necessary to reduce these activities. It is hoped that in the coming year, more will be done in these areas.

8.3 National Events/Exhibitions

8.3.1 Mashramani 2004

During the month of February, the GNBS participated in Mashramani celebrations. Once again, the GNBS teamed up with Hits and Jams and the Ministry of Tourism, Industry and Commerce to celebrate Mashramani. It is hoped that the response by GNBS staff to this activity would be improved in the coming year.

8.3.2 Info-fest 2004

During Information and Library Week (May 17-21, 2004), staff of the Information Services Department took the initiative to arrange the Bureau's participation in Info Fest. During the period, a mini exhibition showcasing documents, periodicals and standards available in the Technical Standards Information Unit (TSIU) were staged by GNBS. The theme for the week's activities was "Connect with the world and open your minds to knowledge." Brochures, factsheets and metric materials were distributed to visitors. Some visitors took the opportunity to find out more about GNBS and its activities.

The objective for participating was to highlight the role played by the TSIU in supporting the standards work of the GNBS. Departments of GNBS seek every opportunity to inform the public about the role and functions of standards and Info Fest was another opportunity that was gainfully utilized.

8.3.3 GUYEXPO 2004

Guyexpo, the National Trade fair was held over the period September 24 - 29, 2004 at the National Exhibition Centre in Sophia. The Bureau participated using the theme "Be wise and standardize", and fulfilled its objectives to (i) educate members of the public about the activities and programmes and its role in consumer protection and (ii) to highlight the importance and use of standards in the Manufacturing, Building and Construction, Weights and Measures and Standards Compliance sectors.

The main focus was to highlight the need for standards in governing trade. This message was effectively brought out in the use of education materials in the form of posters and factsheets. Information material was distributed to the scores of visitors to the GNBS booth. Video Clips depicting the aftermath of Ivan's destruction of Grenada were shown to highlight the need for adhering to the National Building Codes.

Visitors to the booth felt that more Inspectors are needed to effectively carryout surveillance exercises countrywide. Others felt that more sensitization activities are needed in far-flung regions. A total of \$561,702 dollars was spent to successfully execute this activity and the overall response by both staff of GNBS and the public was very satisfactory.

8.3.4 National Quality Week/World Standards Day 2004

National Quality Week 2004 was celebrated during the week October 11-15, 2004 with World Standards Day being a part of the week, and celebrated this year under the theme "Standards Connect the World."

This year's activities received full support from external stakeholders from Industry, Media Houses and Members of the Public. Some of the highlights of this year's celebrations were: "What the people say about standards", featured by Stabroek News; several guest appearances by GNBS staff on NCN Radio and Television; messages to mark the occasion by National Standards Council Chairman, Director of GNBS and for the first time, a message by the President of the Guyana Manufacturers Association, Mrs. Doreen De Caries; Newspaper Supplement; GNBS Open Day with live radio coverage for one hour; a panel discussion on the theme; and staff appreciation day. Prospective ISO companies also participated by inviting secondary school students and members of the media to tour their operations.

During this year's activities, the GNBS was heartened by the financial assistance received from companies such as National Bank of Industry and Commerce, Bank of Nova Scotia and the G. T & T. This year's celebration was bigger and made inroads into new territory, e.g. the staff luncheon hosted by Management and satisfactory involvement by Corporate Guyana. National Quality Week was a resounding success.

8.4 Other activities

8.4.1 Furniture Workshop

Head of the Information Services Department and Senior Inspector, Lloyd David, conducted a two Day Furniture Workshop under the LEAP Programme for Furniture Manufacturers in Region #10. The main topics dealt with were: Drying methods for lumber, Seasoning defects, Furniture defects, Finishing, Designing and layout of factory. Site visits were paid and recommendations were made for improvement. The sessions were well received and evaluation sheets were completed. Participants suggested that other small manufacturers should be targeted in future exercises.

8.4.2 During the year 2004, a number of activities were undertaken by the Department. These included preparing correspondences in response to letters in the press and consumer complaints, attending inter-agency planning and evaluating meetings, completing questionnaires to furnish data for international institutions, attending special conferences and meetings, participating in training programmes, representing GNBS at relevant functions and giving news interviews.

9.0 METRICATION

The metrication programme had experienced mixed fortunes over the past year because a large section of the retail sector remained unchanged and continued to operate in the imperial system, oblivious to the growing trend of adopting the metric system. On the other hand, other areas such as supermarkets and corporate Guyana have responded favourably to the adoption of the metric system.

9.1 Legal Metrication Sub-Committee

The Legal Sub-Committee which was setup to lend support to the National Metrication Committee, in effecting proposed changes to existing legislation in imperial units, met monthly to review the proposed Motor Vehicle and Road Traffic Act. Members were drawn from Ministry of Legal Affairs, Ministry of Home Affairs, Attorney General's Chambers, Guyana Police Force and the Guyana National Bureau of Standards. Upon completion, the Motor Vehicle and Road Traffic Act was submitted for typing. Further reviews were conducted by the National Metrication Committee (NMC) but setbacks with respect to the migration of key members and scanning of the document to reduce the typing load have halted the final completion. However, in the first quarter of the new year, this document would be completed and sent to the Guyana Police Force. The next legislation to be reviewed is the Customs and Trade Act.

9.2 Activities of the National Metrication Committee

The National Metrication Committee (NMC) convened five (5) statutory meetings for the period January to November. The Committee's main function was to lend support to the activities set out in the metrication work plan of the Guyana National Bureau of Standards by presenting fresh ideas and strategies and assisting in identifying possible additional sources of funding to push the National Metrication Drive. The Committee comprised representatives from Regulatory bodies, Guysuco, Guyana Forestry Commission, Guyana Consumers Association, the Ministry of Public Works and Communication, Guyana Police Force, GNBS and NCERD.

A live television programme was held on NCN Television on June 09 and the Chairman of the National Metrication Committee was part of the panel that answered customers' concerns about difficulties associated with the implementation of the metric system and the failure of many leaders to lead by example in the use of the metric system. Through its membership, the National Metrication Committee was able to have new road signs posted at the various construction sites around the country in metric units. The representatives of the Ministry of Public Works gave support in this area.

9.3 Metrication in commerce

Metrication Officers provided technical and moral support to vendors and store owners in each Region on the use of the metric system in their business transactions. They were briefed on:

- (1) How to measure in metric units:
- (2) How to adjust prices from imperial to metric;
- (3) Common "mal-practices of vendors", for example, the longstanding habit of retailing grains in litres. Vendors were selling rice in litres and not in kilograms as was advised;
- (4) Utilisation of price charts, which would guide customers when purchasing items relating quantities to prices; and
- (5) Prepackaging in metric vendors who sell rice and peas were urged to prepack in kilograms and grams.

They were issued with supporting factsheets.

Generally, vendors expressed mixed views about the metric system. Their complaint was that consumers were still demanding items in imperial units and most were reluctant to initiate change, while vendors were showing a more positive approach to metric. Prepackaged and canned products imported from the United States are labelled 50% in full imperial units and the other 50% in the following sequence of imperial units followed by metric units. Local pre-packed products are 99% correctly labelled in metric with only 1% of irregular variance and non-conformity. The large textile importers are importing their "bales" in metric, but the retailers are forced to retail textile in imperial quantities due to public demand. They were advised not to do so. Out of the metric out reach programme, it was discovered that diverse selling practices existed among the senior members of the population, for example, (provision and rice vendors) and even moreso, with consumers generally when it comes to understanding the very basic concepts of metrication.

The local industries, particularly Guyana Sugar Corporation, continued to set the pace in the full utilization of the metric system. Guyana Forestry Commission continued to promote the metric system by enacting regulations mandating its use, but sawmillers and lumber dealers were reluctant to adopt the change.

9.4 Metric Misuses

Over the year, scores of metric misuses were identified. They were misuses of the international twenty-four hour time system and also, measurements. Subsequently, dozens of letters were sent to the defaulters pointing out their misuses and giving the correct version of the misuses.

9.5 Sector Activities

In order to assist sector organizations in switching over to the metric system and to use the system correctly, letters and materials were sent out to all media houses, advertising agencies and the metrology office, pointing out misuses and sharing information regarding corrections. As a result, there had been a reduction in the number of misuses found in the daily papers and on radio and television. GBC needs to be commended for taking the initiative in this area.

9.6 Training

The Metrication Division offered training free of cost to Schools, Ministries and other agencies. The following organisations received training:

- (1) Sophia Special School 71 Students and 4 Teachers.
- (2) Police Ranks Representing the entire C Division 20 ranks from all stations in the Division.

The Guyana Police Force must be commended for ensuring that their new and existing recruits received the training offered.

9.7 Metrication sensitization/Surveillance activities

Metric sensitization sessions were conducted in various Regions of Guyana to provide personalized explanations on how to use the system. Vendors and retailers were spoken to on a one-to-one basis and shown how to sell in metric.

Region #2

In Region #2, Pomeroon/Supernaam, GNBS Inspectors sensitized:

- (1) Business premises between Marias Lodge and Supernaam.
- (2) Vendors from Supernaam, Suddie, Anna Regina and Charity markets. A total of 387 premises were visited.

Here again, they were encountering the problem of the public not requesting goods in metric quantities. It was felt that legislation was needed to deal with this recurring problem.

Region #3

Metrication Officers along with Region #3 Inspectors conducted sensitization and surveillance at Business premises from Vreed-en-Hoop to Parika. Stakeholders, especially the business owners, were willing to use the metric system but they encountered tremendous difficulties with members of the public who requested

items continuously in imperial units. Some 247 premises were visited, including markets and shops.

Region #4

Metric sensitization sessions were conducted for the following stakeholders at their place of business by Metrication Officers. The commonly used metric units and "Pricing" were the topics dealt with. Checks were carried out to ensure that metric labelling and devices were being used. The following premises were visited:

- (1) Business premises in Regent, Water and Camp Streets.
- (2) Supermarkets in Georgetown.
- (3) Municipal Markets: Bourda, Stabroek, La Penitence and East La Penitence. Some 270 shops and stalls were visited.

Region #6

Business premises in New Amsterdam between Strand and New Streets, and vendors in New Amsterdam Municipal Market (28. shops and stalls) were also visited. Other areas covered were East Coast Demerara and West Bank Demerara where 38 shops and stalls were visited.

The objective of these visits was to accumulate actual data from stakeholders and to provide technical support to the various sectors enabling them to manage and adopt the metric system. There were many challenges which limited the amount of work carried out, for example, inadequate staff, transportation difficulties and financial shortfalls.

The findings from surveillance activities countrywide revealed that although vendors, shopkeepers and retailers were in possession of metric devices, they continued to facilitate consumers by trying to sell them in imperial quantities. The remaining regions were not covered due to unavailability of personnel in those regions and shortage of manpower.

After evaluating all the data acquired, one main and very important conclusion was deduced, i.e., the ordinary members of the public "Man in the Street" are the main defaulters in coming in line with metrication. Thus, in order to fully execute a more cohesive metrication programme, more commitment, revenue and priority need to be placed on the importance of understanding and using metric.

The following areas would be addressed:

(1) Need to design a programme to target and reach ordinary members of the public.

- (2) Sensitisation TV, Radio and Bill Boards.
- (3) Surveillance.
- (4) Consumer feedback.
- (5) Factsheets, Posters, Conversion Charts, Booklets and Manuals.
- (6) Transportation.

A more proactive approach would be adopted in order to fully drive the metrication programme. The large manufacturers, producers, distributors and key Government Ministries would have to be directly involved so that the public could acquire the confidence and understand the importance of metric, thus having their full commitment and cooperation.

10.0 STANDARDS INFORMATION

Over the past year, this department obtained a CDS-ISIS data base which made retrieval of information more accessible and user friendly. All documents/materials that were acquired had been recorded, thus traceability is more efficient. Various literature were received and placed into special locations identified. Getting Standards from regional and international institutions was time consuming. Hence, TSIU for the coming year, would be focusing on meeting a National Documentation Centre level by reorganising and labelling the collection.

10.1 Automation of TSIU

During this year, approximately twenty-five (25) new documents were input into the data system installed for this purpose.

Other additions received by TSIU were recorded by the use of a manual system which is a substitute, until all documents can be input into the data system. Those additions were indexed, classified, labelled and interfiled/shelved by subject, title or reference/call number in sequence. This is an ongoing activity. When automation is completed, it would strengthen this collection development and make information sharing worthy. It also assisted libraries to relate with others for the purpose of loans, etc.

To effectively and efficiently retrieve documents, TSIU is in the process of inserting data in its new database. However, it must be noted that this process would need one more officer for it to be achieved in a timely manner. Each document has to be catalogued/indexed and be given specific subjects.

10.2 Upgraded Collection

Within this period, the Technical Standards Information Unit had recorded a total of one thousand and twenty-two (1,022) new acquisitions. This figure represents an increase of 6.34% more than the same period last year. Hence, the collection is expanding vastly with text books, magazines, standards (local, regional and international), course materials, codex materials, CROSQ documents and CD-ROMS.

All books were classified, indexed and lettered using the Dewey Decimal Classification Scheme which was accompanied by Sears Subject Heading. Some materials had an in-house index prepared to make retrieval less strenuous. Should more financial resources be allocated in this direction it would assist tremendously in the fostering of the collection development.

During this period, it was recognized that University of Guyana students had utilised TSIU frequently, especially in forestry, science and technology disciplines.

10.3 Becoming the sales representative for foreign standards

Correspondence was sent to ISO contact person requesting the conditions that Guyana National Bureau of Standards had to comply with before it can be granted permission to be its representative. That request is still with ISO General Secretary for a decision.

If this permission is given to GNBS, it would be able to generate more revenue, as well as ISO reclaiming its percentage on an annual basis. When GNBS becomes the sale representative for Regional and International Standards, it could gain more recognition from clients/manufacturers.

A feasibility study would be conducted to establish the type of standards that are really needed rather than having unwanted standards placed on shelves to take up limited shelf space.

Should GNBS become an agent for regional and international standards, it has to provide a security system for the documents and also make sure that the percentage agreed upon is sent on the prescribed time frame set by both parties.

It is advisable that metal cabinets/shelves with locks be provided to store these documents as there must be accountability and traceability for the documents at all times.

10.4 Upgrading GNBS Website

Meetings were conducted pertaining to the upgrading of GNBS website. A website developer was identified and is currently working on GNBS site. When GNBS website is established, it will bring about efficiency to GNBS roles and functions. Clients/Stakeholders would be able to appreciate GNBS activities/tasks and have the opportunity to gain valuable information on each work programme. It is an admirable initiative that would attract clients globally.

10.5 Producing current awareness bulletin on a monthly basis

During the period, five hundred and thirty-three (533) copies of Standards Information Bulletin (SIB) were reproduced and sent to agencies, clients, organisations, institutions and Sector Committees. Articles on the subjects listed below were prepared by Technical Officers in relation to their programmes.

Month	Article/Subject										
January	Engineering/Metrology and Compliance										
February	The Metric Patch to Global Markets and New Jobs										
March	Why Organic Farming										
April	Water: With World Consumer Rights Day Celebrations, under the theme "Water is a consumer right" just over the horizon, the state of the World's water is uncertain.										
May	Conformity Assessment										
June	Safety in Laboratories										
July	Getting Around-Certification										
August	Market Opportunities of the CARICOM Single Market and Economy (CSME) for Guyanese Firms.										
September	Quality Management System in Agriculture Need and Opportunity.										
October	Laboratory Testing, A Service or A Business?										
November	Quality Assurance										
December	Weighing and Measuring Tips for Consumers and Tips for Consumers when purchasing products.										

This is an ongoing task for Technical Officers with coordination by TSIU Senior Information Officer.

Articles published by Technical Officers are tremendously helpful in assisting consumers, clients and stakeholders to achieve their objectives. It is an approach that is useful in the sharing of literature to consumers, industries, agencies and institutions. Vast interest was expressed by stakeholders and clients about the benefits they are receiving from those articles.

10.6 Monthly Statistics

Table I shows the TSIU statistics for 2004. The figures this year showed an outward pivot in the sale of standards. There had also been an increase in the number of new documents received by 6.34% than the previous year. It is expected that for 2005, the sales figure would heighten from the publicity that would be given in the media.

Table I TSIU Statistics for 2004

These are the figures tabulated during 2004.

No.	Activities		Months											
110.		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total for 2004
î	Acquisitions	59	162	65	27	90	117	104	65	69	64	157	43	1,022
2	Books catalogued & classified	-	-	-	1 3		-	4	-	4 11	-	-	16	20
3	Books bound		4.		7=	112	-	1		-	1	3	2	7
4	Draft Standards for Public Comments - Local	-	1	1		-		-		2	4			8
	- International	-	-					<u> </u>						
5	Loans - External - Internal	10 14	2	- 46	21 2	- 11	- 21	23 12	6	- 10	25	17	1	61 166
	Lettering of Documents	17						141		-	46	26	40	261
6	Newspaper clippings	42	30	210	87	47	109	70	29	63	-	120	114	921
8	Queries - External	18	4 17	10 26	15 14	3 10	13 24	28 21	24	5 10	22 4	21	 8	163 147
	- Internal Standards bound	178	4	29	23	40	9	12	28	24	47	32	6	432
9	Standards bound Standards cover printed	213	4	29	47	30	8	8	28	24	66	29	6	492
11	Standards cover printed Standards printed		-	29		_	-	2	-	-	-	-	-	29
12	Standards sold	8	6	9	4	19	9	13	11	4	12	14	2	111
13	Usage of the internet facility	47	24	31	32	5	15	33	5	22	27	49	13	303
14	Visitors	7	11	10	1.1	7	5	14	60	20	100	11	6	262
15	Standards issued (complimentary)	9	T -	1	36	1	-	12	-	3.	3	-	11	66
16	Copyright page printed	300		A96- 7	-	-		-	• 70 ·		-	-		370
17	Annual report bound		192	5	-	-	-	-	-	-	-	-	-	5
18	Catalogue cards written and interfiled	-	-	1	-	-	_	15	-		177		56	71

The one hundred and eleven standards that were sold represent a total of six hundred and fifty three thousand, seven hundred (\$653,700.00) dollars.

There has been an increase in revenue earned this year when compared with last year's figure of \$443,600.00)

10.4 Other Activities

- 10.4.1 Ms. R. Bourne, Senior Information Officer was once more elected as Guyana Library Association (GLA) Executive Member. This Committee meets every first Wednesday in each month to discuss the way forward in library development.
- **10.4.2** Approximately, five hundred and seventy-five (575) ISO standards were withdrawn from GNBS collection. These documents are in the archive section.
- 10.4.3 GNBS 2005/2006 catalogue is in its final stage in the Registry Department.
- 10.4.4 Guyana National Bureau of Standards was able to get its automation system installed. Mr. Kissoon, Consultant to the Cheddi Jagan Research Centre and Ms. Monsten, Trinidad Information Technologist were commended for their sterling contribution made towards achieving our data base software application set up.
 - Ms. R. Bourne made an in-house presentation on Cataloguing and Classification.
 - Codex and documents in the cabinet were sorted, labelled and filed by specific title and subjects.
 - TSIU took part in GLA's annual activity Info Fest.
 - A display was mounted for Quality Week/World Standards Day.
 - Ms. Debra Gill and Ms. Bourne attended CROSQ Training Sessions held at GNBS.
 - Sessions were held with the Codex Consultant on how documents should be arranged and discarded and both officers attended.
- 10.4.5 In commemoration of World Standards Day, this department mounted a display on labelling requirements, Guyana Building Codes, Regional and CARICOM Standards and some text books on Quality Assurance.
- 10.4.6 For Info Fest which was hosted by the GLA at its 36th Anniversary celebration, GNBS was an integral part for three (3) days. GNBS showcased labelling standards, codex materials and tapes were shown on quality and standard. The theme was "Connect with the World and Open your mind to Knowledge."

11.0 ADMINISTRATION AND FINANCE

The objective of the Administration and Finance department is to render administrative and financial support in the most cost effective and timely manner in the achievement of the objectives of the various Departments within the Bureau, as outlined in the work programme.

11.1 Staff Welfare

The Bureau and the Guyana Public Service Union had finalised and signed a Recognition Agreement on August 20, 2004. The Agreement expressed the entire understanding and presented or outlined a procedural approach to the avoidance and settlement of disputes or any issue under consideration as it relates to the employee/employer or the union.

11.2 Staff Training

- 11.2.1 Ms. June Prince, Ms Candaicy David and Mr. Forbes Mitchell, Technical Officers of the Standardisation Department participated in a two (2) weeks training programme in Trinidad and Tobago. The programme was sponsored by Trinidad and Tobago Bureau of Standards, in collaboration with Premier Quality Services Limited and funded by CPEC. The theme was "Standards Development for Industry and Commerce" and was specifically designed for Standards Officers and Technical Specialist assigned with such responsibilities. The main objectives were to provide practical and theoretical knowledge in the area of Standardisation with specific emphasis on the Caribbean Region.
- 11.2.2 In addition, Ms. Candaicy David, Technical Officer and Coordinator of the CODEX programme, attended the fourteenth session of the FAO/WHO coordinating committee meeting for Latin America and the Caribbean during the period November 29, 2004 to December 3, 2004, in Buenos Aries, Argentina.
- 11.2.3 Mr. Owen Ramsay, Consultant, facilitated a two day Quality Coordinators workshop on February 04 and 05, 2004 in the Training Room of the Bureau. The workshop was attended by the participating companies under the CPEC/GNBS ISO 9001 project and by four staff members of the Bureau. The objectives were to train the participants in "Auditing Management Systems".
- 11.2.4 Ms. Candelle Walcott, Technical Officer II of the Standardisation Department attended the 2nd Standards Sub-committee meeting on 'Strengthening of Medical Laboratory Services in the Caribbean'. The meeting was held from April 20 21, 2004 in Grenada and focused on the following:
 - Adopting a draft guidance document, which will facilitate the implementation of Standards in Regional Laboratories;
 - (ii) Reflecting the way forward; and

- (iii) Creating a Caribbean Laboratory Accreditation Services, Advisory and/or Certification Body.
- Mr. T. Michell, Legal Metrology Specialist from Jamaica Bureau of Standards, completed the third and final module on Legal Metrology. The training which was funded by Caribbean Development Bank (CDB) delivered the necessary skills to the Bureau Inspectors, thus equipping them to render efficient services in Legal Metrology to stakeholders. The training comprised of three modules in the areas of volume, length and weight/mass.
- 11.2.6 Ms. Roxan Bourne, Senior Information Officer, attended a Seminar on Marketing and Public Relation Strategies for Library and Information Services during the period May 20th to 21st, 2004 at the National Library Conference Room. The objectives of the training were to provide an understanding on Public Relation strategies and enhancing the usage of library information and documentation.
- 11.2.7 Mr. Shailendra Rai, Chief Inspector participated in a four day symposium and workshop under the theme "Metrology, Society, Commerce, Environment and Health for the Americas" during the period June 28 July 01, 2004 in St. Lucia. The objectives were to promote Metrology and provide information on the Role of Metrology as a basic tool for Conformity Assessment and free trade.
- 11.2.8 Mr. Jowala Somai, Head, Management Systems and Ms. Shune Vickerie, Technical Officer II respectively, attended a WTO/TBT "Train the Trainers" workshop in Barbados. The workshop covered areas of Technical Regulation, Conformity Assessment and Code of Good Practices for Standardisation etc.
- 11.2.9 Mr. Jermaine Softley and Mr. Keemo Fyffe, both Senior Inspectors attended a five (5) day work attachment programme in Trinidad and Tobago Bureau of Standards on Metrology, specifically in Temperature and Pressure Calibration.
- 11.2.10 Mr. Khemraj Bhoowan, Technical Assistant/Network Officer, participated in the "Certificate Course in Network Design" training programme from October 4 to November 12, 2004 in New Delhi, India, under the ITEC programme. The objective of the course was to acquaint the participants with the necessary information required for setting up a network.

11.2.11 Legal Metrology

Inspectors of the Bureau received training on the third module of Legal Metrology. The three week training was conducted by Mr. Tweedsmuir Mitchell, Metrology Consultant, Jamaica Bureau of Standards in May 2004. The Training covered a range of topics including, calibration of secondary standards in the areas of mass, length and volume, tolerances, uncertainty in calibration of mass, length and volume, calculation of MPE for balances and fuel dispensers, verification of bulk meters, calibration of storage tanks, and verification of calipers, micrometers and pipettes. With the completion of the three

Module of the Legal Metrology Training programme, Inspectors are now competent to execute verification and calibration services in the areas of mass, length, and volume for working standards used by the Bureau, to ensure traceability and accuracy, and for devices used in commercial trade and laboratories. As a result, these services can now be accessed by companies locally at the GNBS at minimal costs.

11.2.12 CARIMET Symposium

The Chief Inspector attended a one week CARIMET training/symposium and workshop on Metrology, Society, Commerce, Environment and Health for the Americas, which was held during the period June 28, 2004 – July 01, 2004 in St. Lucia. It was hosted by St. Lucia Bureau of Standards in collaboration with SIM and CARIMET. The main objectives of this training/symposium were to discuss ways of harmonizing metrology among CARICOM member countries and to convene the CARIMET meeting.

By attending, Guyana was able to participate in the discussions held during the symposium and meeting and the necessary feedbacks on the status of metrology in Guyana were provided. Also, the Bureau was able to make a few changes to its metrology system based on information acquired and discussions held with representatives of other participating countries.

- 11.2.13 The Technical Officers, Mr. Robin Bridgemongal, Ramrattie Karran, Anthony Ross and Candaicy David, attached to the Management Systems and Standardisation Departments participated in a three-day training programme on Internal Audit at the Tower Hotel on February 18 20, 2004. The objective of the training programme was to provide practical and theoretical knowledge in the area of Audit.
- 11.2.14 Mr. Jowala Somai, Head of the Management Systems Department and Anthony Ross, Robin Bridgemongal and Ramrattie Karran, Technical Officers attended a five-day ISO 9001 Lead Auditor Training at the Bureau's Training Room. This training was coordinated by Mr. Rob Sibley, Consultant from the GQI Canada.

11.3 Staff attendance at Workshops

11.3.1 Workshop on Food Safety for Cottage Processors

The workshop on Food Safety for Cottage Processors was conducted by the Guyana Poultry Producers Association (GPPA), in collaboration with the Caribbean Regional Human Resource Development Program for Economic Competitiveness (CPEC), on July 27, 2004 at the Cheddie Jagan Research Center. Presentations were conducted on the following topics: Objective of workshop, outline of the Veterinary Public Health Unit programme in the Cottage processing establishments in Guyana, outline of Mayor and City Council's inspection procedures, Outline of Caribbean Cottage processors and proposed Safety Code of Practice for cottage processors.

11.3.2 Workshop on Food Safety Bill

A one-day workshop wad held to review the draft Food Safety Bill for the Food Control System and accompanying regulations. The workshop was conducted by the Government of Guyana and the Food and Agriculture Organisation of the United Nations (FAO) on February 17, 2004 at the Foreign Services Institute. The workshop was part of a larger project focusing on strengthening the Food Control System in Guyana, which is being implemented by the Ministries of Health, Fisheries Crops and Livestock, with support from the Food and Agriculture Organisation (FAO). The facilitators of this workshop were Mr.George Sarpong – International Legal Consultant, Mr. Fazil Aseez – National Legal Consultant and Ms. Jessica Vapnek – Technical Specialist from the FAO Headquarters in Rome.

11.3.3 WTO/TBT Workshop

WTO/TBT Train the Trainers workshop on the implementation of Guyana's obligations under the WTO/TBT Agreement. The workshop was organised by the Caribbean Community (CARICOM) Secretariat, the Caricom Regional Organisation for Standards and Quality (CROSQ) and the Center for Trade Policy and Law, with presenters from the Standards Council of Canada (SCC) on December 01-03, 2004 in the Conference Room of the Grand Barbados Beach Resort Hotel in Barbados.

The purpose of this workshop was to train Representatives of the CARICOM Regional Organisation for Standards and Quality (CROSQ) and National Bureau of Standards within Caricom Member States on the implementation of their WTO/TBT Agreement obligations.

11.3.4 Impact Assessment

Training programmes on Impact Assessment on Economic Partnership Agreement (EPA) and the Cotonour Agreement. The programme was conducted by the Ministry of Foreign Trade and International Cooperation on May 11, 2004 at the Customs and Trade Administration.

11.3.5 FAO Meeting

The FAO Project Steering Committee meeting was held on June 29, 2004 at the Ministry of Agriculture boardroom. The purpose of the meeting was to assemble committee members to make comments and suggestions with regard to the circulated report by the International Food Control Administration. The report detailed the Consultant's second mission undertaken in March 2004 and included a number of addenda which cover all aspects of the projected Guyana Food Safety Authority.

11.3.6 The Organisation of American States funded a Regional Workshop on Entrepreneurial Skills. This workshop was hosted by Stitching Ultimate Purpose (Suriname) in

collaboration with CAFRA (Caribbean Association for Feminist Research and Action) Guyana and Suriname. Ms. Bourne attended as a member of CAFRA/Guyana, which was held December 8-9, 2004 at the Guyana Red Cross Training Room, Eve Leary, Kingston. The theme was "Taking our stance, strengthening entrepreneurs towards active competitiveness. The topics discussed were:-

- The need for the Caribbean to focus on niche market.
- The need for active competitiveness: the link between sustainable development and trade relation.
- Demands of present Trade Relations. (CSME, FTAA, WTO).
- Possibilities for individual entrepreneurs to meet those demands.
- Cooperation to meet demands: Producers Association.
- Marketing strategies for small business and entrepreneurs.

11.3.7 Ms. Bourne was present at Guyana Library Association Seminar held May 20-21, 2004 at National Library Conference Room. Its theme was "Marketing and Public Relations for Libraries and Information Services". Both facilitators were informative and formal with their presentations. Participants are better equipped with mechanisms to disseminate information within and outside of their organization, using a variety of media such as formal (Press Conference, Seminars, Symposium) and informal (book markers, newsletters, flyers, exhibitions). An effective Public Relations Strategy is to deliberate plans and systems to establish and maintain mutual understanding between ones organisation and the public.

Marketing is the ability to systematically plan, implement and control business activities that intend to bring together buyers and sellers for the exchange or transfer of products for mutual advantage. Thus, Technical Standards Information Unit would devise ways and means that could attract clients to purchase GNBS's Standards with the use of PR and Marketing tools made accessible.

11.4 In-House Training

During the period January to November 2004, a total of nineteen (19) in-house presentations were made by Senior Staff members to the general staff. These sessions were held in the Training Room of the Bureau on Friday afternoons. The objectives of these sessions include the training of staff members to deliver presentations (power point), and thus, build capacity to make external presentations, deliver information/knowledge to staff, technical and non-technical, about the particular disciplines of standardization or areas of work of the Bureau, and promote the team spirit of the GNBS. These presentations would continue in the new year and would include the invitation of guest speakers on particular topics of relevance and interest.

11.5 Confirmation

Ten (10) Officers were confirmed in their respective positions during the year in review. Confirmation to positions was based on job performances, attendance, punctuality etc.

Three (3) officers within the Bureau were identified to coordinate the activities of three Departments, viz:

(i) Candelle Walcott - Metrology (ii) Shune' Vickerie - Standardisation

(iii) Sheron Daniel - Registry

11.6 Staff Awards

Six (6) members of staff were awarded for long service at the Bureau. These officers were:

Dr. Chatterpaul Ramcharran	10 years
Mr. Jermaine Softley	5 years
Mr. Keemo Fyffe	5 years
Mr. Lloyd David	5 years
Mr. Miciah Sukhu	5 years
Mr. Khemraj Bhoowan	5 years

The presentation was done at a simple ceremony as part of the National Quality Week in the presence of other staff members, Council members, the media and special invitees. In the speech delivered by the Director, staff members were encouraged to be steadfast and concentrate their efforts in the development of the Bureau.

11.7 Staff Turnover

During the year in review, four (4) members of staff resigned, viz:

- (i) Mrs. Donna Sealey-James, Administrative Officer, with effect from February 5, 2004 after nineteen (19) years service,
- (ii) Ms. Melissa Theobald, Typist Clerk, with effect from September 13, 2004, after seven (7) years service,
- (iii) Mr. Rondell Watson, Administrative Officer with effect from September 30 after nine (9) months service, and
- (iv) Mr. Ravel Persaud with effect from December 22, 2004 after twenty-three (23) months service.

With the exception of Mr. Watson, the other officers have migrated from Guyana.

11.8 Termination

The services of seven (7) Officers were terminated during the year 2004. Also, the Bureau recruited the services of ten persons to fill vacancies that existed due to the termination of services and resignations.

11.9 Re-organisation

In compliance with WTO requirements for conformity assessment, a new Department was established to deal with testing, viz: the Laboratory Services Department. This Department would conduct testing for rice, gold and carry out all calibration activities of metrology standards, and working standards from clients. Three (3) Inspectors were assigned to the Laboratory Services, while one (1) was transferred to the Metrication Programme.

11.10 Equipment Maintenance

Repairs were effected on a number of computers in the Bureau. In many cases, repairs were conducted on the same computer system repeatedly. It was noted that the damages were due to fluctuating power supply, unstable floor, rigid environment, thus incurring high costs.

The standard meter for the energy test bench was calibrated at Jamaica Bureau of Standards during the year. In order to effect accurate testing of meters, the standard meter would be calibrated every year.

11.11 Building maintenance

An extension to the existing building of the Bureau was effected to house the Conformity Assessment Laboratory. Additionally, a Rice Laboratory was designed and constructed to facilitate the testing and analysis of rice. Further infrastructure work was also conducted on the Volumetric Laboratory.

The gutters to the Building were replaced to reduce flooding. Rotten floor boards were replaced and the entire ceiling to the Conference Room was replaced and repainted. Additionally, the building was periodically sprayed for woodants, termites and poison was set for rodents.

11.12 Vehicle Maintenance

Vehicles #PEE 883 and PDD 9567 had their engines overhauled and critical parts replaced. PFF 6922 had major repairs conducted during the year. Generally, servicing was done as scheduled. However, because of the age of the vehicles, a high maintenance cost had been recorded.

11.13 Servicing meetings

One hundred and ninety-three (193) Technical Committees, Sub-committees, Working groups and National Standards Council meetings were held during the year.

11.14 Registry

For the period January to December, 2004, a total of 1,365 documents were typed, 794 posted, 3,168 dispatched and 1,489 correspondences filed.

11.15 Audit

Due to a large scale asset verification process with the Auditors, the 2002 Audit is still being conducted. This exercise would be concluded early in the new year, thus initiating the audit for 2003 and 2004 respectively.

11.16 Procurement

Twenty million dollars (20M) worth of conformity assessment equipment was purchased and received during the year 2004. Additionally, four fans, carpet and one small printer were purchased during the year under review.

The Bureau was able to purchase one reconditioned truck (GJJ 3011) with crane to facilitate bulk scale verification countrywide. The cost amounted to 3M, resulting in a down payment of 2M and ten monthly installments of \$100,000.

11.17 Financial Review

The GNBS operates two accounts:

- * Government Subvention Account (#688-109-8)
- * Other Income Account (#688-746-7)

Government Subvention received for the period January to December 2004 totalled \$62.947 M dollars, while expenses for the said period totalled \$62.960 M which reveals a bank over draft of 13 thousand dollars.

Table 1 shows the nine (9) major expenses for the year 2004 financed by Government Subvention.

Table 1 Major Expenses

Chart of a/c	Line Item	Amount
101-106	Wages & Salaries	40,009
201-205	Overhead Expenditure	12,361
121-124	Equipment & Supplies	914
131	Fuel & Lubricants	2,167
141-143	Rental & Maintenance of Bld.	693
161-165	Transport, Travel & Postage	1,318
171-173	Utility Charges	2,448
181-184	Other Goods & Services	1,668
191-194	Other Operating Charges	1,382
	Total .	62,960

A budget of 76.8 M was submitted. The organization received a budget of 68.9 M which was broken down as 52.3 M for salaries, 2.9 M for retroactive salary (5%), 8.7 M as other charges and 5 M for capital releases to purchase pressure equipment for the Standard Compliance Department.

Other Income received for the period January to December 2004 totalled 24.3M of which 22.1M was utilised to partly offset operational expenses during the year due to the unavailability of subvention funds (budget cut).

Table 2 shows Income Generated and Refunds for 2004.

Table 2
Income generated

Revenue Centres	Amount
Import Monitoring Fees	5,300,400
Verification of Devices	9,137,270
Sale of Publications	724,455
GNBS/CPEC Training Programme	5,404,856
Rice Testing & Lab Fees	2,192,759
Donations	91,644
Pension Refunds	1,479,603
TOTAL	24,330,987

The percentage of income generated by the five (5) main revenue centres are shown in Figure 5. The expenses incurred from the income generated are shown in Table 3.

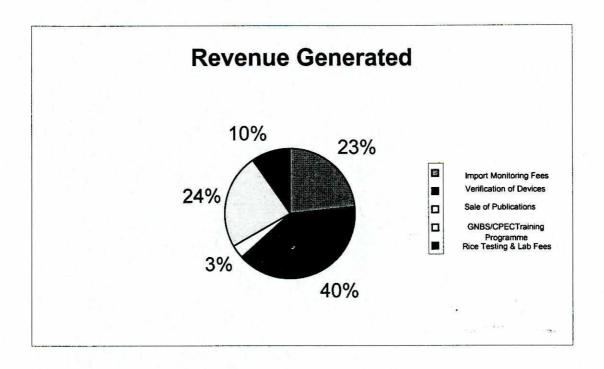
Table 3
Expenses incurred from Income generated

Expenses	Amount
Goods and Services	6,127,951
Travel Expenses & Subsistences	2,534,034
Employment Cost	3,016,801
Public Utility Charges	770,580
Rental of Equipment	330,000
Maintenance of Building & Equipment	2,044,834
Purchase of Motor Vehicle	2,500,000
Maintenance of Vehicle	1,371,781
Training	2,859,424
Refund (Pension Contribution etc.)	620,970
TOTAL	22,176,375

A CPEC/GNBS Quality Management System training programme commenced during the previous year which was able to generate additional funds during 2004 for services provided to various companies, as indicated in the Revenue Centres.

Figure 5

Percentage of Income generated by the 5 main Revenue Centres



12.0 OBSERVATIONS AND COMMENTS

12.1 Financial

The financial year 2004 has not been without its challenges for the GNBS, with the cut of \$14M from the requested Annual Budget. Efforts were accordingly made to adjust spending while trying to achieve the targets established. The income of approximately \$24M from revenue generated by the GNBS assisted tremendously in the implementation of the various programme activities as an increase of \$11M had been realised over the previous year 2003. The GNBS was able to meet its obligation of employer pension contribution for staff which amounted to \$2M. While the planned programme budgeting principles could not be applied in order to allocate funds for each Department of the GNBS, it is expected that in the new year, this would be possible.

12.2 Information Technology (IT)

IT has been identified as a separate objective in the Work Programme of the Administration and Finance Department, thus establishing a range of activities in order to ensure an efficient network system is maintained in providing an effective support to the various Work Programme operations of the GNBS. In the new year, greater attention would be paid to the integrity of the IT system. A Coordinator of this IT Programme, Mr. Khemraj Bhoowan, has been appointed, as he was accordingly trained in India for six (6) weeks during October/November of this year. Efforts would be made, inter alia to:

- (i) upgrade existing hardware and software where necessary;
- (ii) acquire new hardware and software to strengthen the system e.g. ten (10) more computers and one (1) large printer are needed;
- (iii) ensuring backup is done on a daily and monthly basis;
- (iv) conducting routine servicing/preventative maintenance;
- (v) updating website information;
- (vi) providing technical support services to staff; and
- (vii) conducting in-house training for staff.

IT has become a vital tool for dynamic organisations.

12.3 Strengthening Weights and Measures Offices

Despite the commitment given by the Regional Chairmen and the Regional Executive Officers of Regions # 1, 8, 9 and 10, no Weights and Measures activities were carried out in these Regions, since there was no designated

Weights and Measures Officers in these Regions, no proper facilities to conduct verification of devices, lack of transportation to execute field activities and the lack of participation at the monthly National Weights and Measures Monitoring Committee meetings. However, the GNBS would continue during the year 2005 to work with the Ministry of Local Government and the Regional Administration of these Regions to address the problems highlighted, in order to facilitate the execution of Weights and Measures activities in these Regions.

12.4 Monitoring quality of imports

Despite several meetings held with the Commissioner General of the Guyana Revenue Authority and the Commissioner of the Customs and Trade Administration (C.T.A) and the commitment given at these meetings to perform agency functions for the GNBS, Customs Officers did not routinely carry out these functions as expected at the ports-of-entry. This resulted in the clearance of commodities without inspection by the GNBS. This has significantly reduced the effectiveness of the Standards Compliance programme of the Bureau. In addition, the Bureau was unable to acquire shipping manifests from the C.T.A. and as such, the shipping agencies were contacted directly for the provision of same. As a result, if there is no improvement in the cooperation from the C.T.A. in the year 2005, the matter would be drawn to the attention of Cabinet.

12.5 Legislation

There is urgent need for the 1981 Weights and Measures Act and the Guyana National Bureau of Standards Act No. 11 of 1984 and its Amendments of 1997 to be reviewed and upgraded. These existing Acts are out-dated and inadequate to address additional activities conducted by the GNBS under the Metrology and Standards Compliance programmes. As a result, there is urgent need for the service of a Consultant, specialised in drafting legislation, to review and upgrade the said Acts and also to develop Regulations under the said Acts in the new year.

12.6 Complaints from Rice Farmers

Resulting from numerous complaints raised by rice farmers regarding short weight and inaccurate dockage and moisture content of paddy supplied to Millers, Cabinet convened a meeting with representatives of the key agencies responsible i.e GNBS, RPA and the GRDB in order to address the issues. As a result, a significant amount of work was done by the GNBS throughout the year to ensure transparency in the weighing operation at Rice Mills Countrywide. These included visits to Mills in Regions 2, 3, 4, 5 and 6 to observe their operations and

provide suggestions for improvements, Meetings with Millers to discuss possible areas of improvements based on observations made during visits, training of farmers on the operation of Mechanical Weigh Bridge Scales and the verification of all scales used at Mills to ensure accuracy. The GNBS would continue to monitor the weighing operation at Mills in 2005 by conducting periodic visits and checks on scales in use and routine verification of scales used by Millers twice yearly to ensure transparency in the rice industry.

12.7 Product Certification

The six (6) permit holders of 2003 continued with the GNBS product certification scheme, and two (2) additional jewellers were granted permits in 2004. The permit holders were able to maintain and improve their quality which is reflected in no complaint being received on certified products and increased sales both locally and in some cases to external markets.

A review of the product certification scheme has commenced to make it more client friendly and with the availability of new standards and testing facilities, more clients are expected to join the scheme in the coming year. The Government can also facilitate this process by adopting a policy to purchase certified products which will force manufacturers to have their products certified.

12.8 Conformity Assessment

During the year, organizations and personnel involved in conformity assessment activities were able to acquaint themselves with the requirements for such activities as it relates to free movement of goods across borders through their involvement in NCCA Sector Committee meetings.

The eight (8) Sector Committees for priority sectors identified, were able to conduct a gap analysis of conformity assessment activities and identify the issues that need to be addressed so that these organizations can conform to international requirements. Some of the organizations have commenced the process of implementing the international standards of ISO 17020, 17025 and Guide 65 in their operations, whilst others have shown some reluctance to institute.

It is expected that those organizations that have started the implementation process would complete this year and others that haven't started, would do so, as to avoid their results being questioned to the detriment of locally-produced products.

On achieving the status of accreditation to these standards, these organizations involved in conformity assessment activities would be in a better position to establish Memorandum of Understanding (MOU) with Guyana's trading partners, hence facilitating a faster movement of locally-produced goods in foreign markets.

12.9 Accreditation of GNBS System

The GNBS has also commenced the process of implementing international standards in its operations i.e the overall operations to ISO 9001 standard, the Standard Compliance Programme to ISO 17020 standard, and Testing and Metrology Laboratory to ISO 17025 standards. It is expected that these processes would be completed and the GNBS with its associated programmes be recognized and be effective.

12.10 Audit Services

The GNBS through funding from international organizations was able to provide training and exposure to its staff members to develop their competence. As a result, a new programme, Audit Services is expected to be launched in the new year, which will focus on providing audit services to laboratories and industries in areas of Quality Management, Environmental Management and Laboratory Management to relevant national and international standards.

12.11 Laboratory Certification

The Guyana National Bureau of Standards is involved in promoting the implementation and maintenance of a laboratory management system in testing laboratories. This is to ensure the issue of accurate, reliable and consistent test results.

With effect from January 01, 2005, new criteria for the assessment of laboratories opting for National Certification was implemented. The criteria was designated to encourage the certification of more laboratories in Guyana to the National Laboratory Standard, GYS 170:2003, "General requirements for the operation of a laboratory". This approach will allow laboratories to develop their systems through a gradual process.

The laboratories will be recognised as either level I, level II or level III based on the minimum criteria established. Level III will be recognized as Class A, where the laboratory has addressed all the requirements of the GYS 170:2003 standard. Level III certification is renewal annually. Level I will be recognized as Class C and Level II as Class B. The laboratories certified to Class B and C will be required to move to the next class within three months.

12.12 Proficiency Testing

The Proficiency Testing Scheme coordinated by the Ministry of Health evaluates the performance of clinical laboratories in conducting tests within their scope. It is anticipated that participating laboratories will be able to evaluate their performance and improve their technical capabilities and in effect improve laboratory quality in Guyana.

The interlaboratory comparison programme conducted by the GNBS assessed the performance of laboratories using reference samples. It was indicated that the results received from participating clinical laboratories showed a wider variance.

Evaluation of the performance of laboratories was done which indicated that there is need for improvement in the technical competence of laboratories.

12.13 Poultry Standards

The Council for Trade and Economic Development (COTED) held its 18th Meeting on January 2005 in Guyana. At this meeting, the two draft Caricom Standards:

- 1) Specification for poultry meats and poultry products; and
- 2) Grading and quality requirements for table eggs, were

approved as voluntary Regional standards in preference to making them mandatory immediately. A grace period of 12 months was granted, after which, a review would be carried out. In the light of this development, all poultry meat producers would be allowed a period of twelve (12) months to make the necessary adjustments to their operations in order to be in compliance with the standards. If at such time poultry producers are not in compliance with the standards, then they will not be able to trade their products and face the likelihood of being out of business.

Based on the foregoing, a meeting would be scheduled with the poultry producers to inform them of this new development to work out an action plan which would ensure their implementation and compliance with the standards, and thus, the improvement in the quality of their products in order to compete in the Regional market.

12.14 Metrication

The metrication issue is becoming more and more important in the context of global trade as countries are required to provide or produce goods only in "metric sizes and quantities". There needs to be standardization in the sizes and quantities. Based on the visit to the Bureau of the Consultant from the Commonwealth Secretariat in November 2004, the Secretariat is developing a project to provide Technical Assistance to drive the metrication process in the Region, using Antigua and Barbuda as a base. That country applied for assistance to deal with metrication.

The Guyana National Bureau of Standards will be intensifying its metrication programme in the coming year as it recognises the pivotal role the implementation of the metric system must play in facilitating trade.

This will be moreso relevant as plans are in the making to launch a Commonwealth Metrication Project in the new year. Given present world trends with respect to trade and trading, more and more business activities are being conducted in metric and Guyana needs to make the necessary preparations now for the change over.

It is noteworthy to point out that the transition period to the pure metric system should be swiftly contracted so as to prevent and eliminate the widespread cheating and manipulation of consumers, by vendors and retailers who are well educated on the system. The unique and best approach to deal with the metric system is not to convert from one unit to the next, but focus on the metric mode exclusively. The strategy that is being advocated currently is the prepackaging of goods in metric sizes and quantities and the fixing of prices (labelling) accordingly. This would assist the young and the old generation to handle the system.

12.15 Industries under the purview of the GNBS

In addition to the seven (7) day furniture training project funded by CPEC, which was conducted on 2004-01-27 to 2004-02-04 and included a three day workshop on the Code of Practice for furniture manufacturing, designing and assembling; the practical application of standards; inspections of furniture at sale outlets; visits to manufacturer's premises; theoretical and practical training on the inspection of furniture to determine structural; workmanship and finishing defects; reviewing of the Code of Practice for the Manufacturing of furniture and Meetings with the Minister and Heads of the Guyana Office for Investment and the Government Technical Institute. There is urgent need for a Specialist in furniture manufacturing, designing, assembling and inspection to be attached to the GNBS

over a period of at least six (6) months to work along with Inspectors in providing training and guidance to manufacturers of furniture at the ground level in order to improve their operations and the quality of furniture manufactured locally for both domestic and foreign markets. This would improve the furniture industry in Guyana. There is also need for acquisition of moisture meters, stickers and measuring tapes to be used in the monitoring of Furniture.

Further, a significant amount of work was done in the Textile and Garments and Jewellery Sectors, whereby manufacturers and dealers were sensitized in the labelling requirements for these products and follow-up visits were conducted at sale outlets to ensure that they were fully labelled as required by the relevant standards. The monitoring of these products would be intensified in the year 2005 to ensure compliance with National Standards and guidance of consumers. The GNBS will commence the licensing of Jewellers to manufacture Jewellery articles in 2005. This is necessary to monitor the quality and labelling of articles manufactured by Jewellers.

12.16 Projects

During 2004, the GNBS was involved in a number of project activities to assist in advancing the work of the organisation. These project activities included:

- (1) The CPEC/GMA/GNBS sponsored training workshop on the National Building Code and Guidelines held at the Carnegie School of Home Economics. This workshop was held in November 2004 and was aimed at enhancing the ability, effectiveness and efficiency of Building Inspectors in the construction industry.
- (2) The CPEC/GNBS Metrology Project in which a survey was done to determine the Metrology needs of industries in Guyana and also the training of two Officers for one week at the Trinidad and Tobago Bureau of Standards.
- (3) The GNBS collaborated with the GMA and CPEC in a furniture project. This Project saw the attachment of a Consultant, Mr. Michael Fortune, who reviewed the furniture industry and standards that were applicable to the industry.

For 2005, the GNBS has identified some key areas in order to approach funding agencies such as USAID and Empretec. The areas of focus include:-

- Good Management Practices for MSE;
- Collaboration with Tourism Authority in auditing accommodation facility; and
- Furniture.

12.17 WTO Matters

The GNBS standards development work programme for 2004 was submitted to the WTO Secretariat. A staff from the Standardisation Department of the GNBS was trained on the implementation of Guyana's obligations under the WTO/TBT Agreement. This training programme was conducted by the Caribbean Community (CARICOM) Secretariat and the Caricom Regional Organisation for Standards and Quality (CROSQ) during December 01-03, 2004 in Barbados. With this training, the WTO Enquiry Point is capable of effectively submitting Guyana's Notifications on:

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- (a) The implementation and administration of the TBT Agreement;
- (b) Draft technical regulations and conformity assessment procedures;
- (c) Bilateral and plurilateral agreements;
- (d) The Code of Good Practice for the preparation and application of standards.

The WTO Enquiry Point at the GNBS would be launched early in the new year.

12.18 CROSQ and COTED

Five Draft Caricom Standards were approved by COTED. These were Poultry meats and poultry products, Table eggs, Safety matches, ISO 15189 (Medical laboratories) and ISO 17025 (testing laboratories). Poultry meats and poultry products, and table eggs were approved as voluntary standards. These standards will be reviewed in twelve months before proceeding to make them mandatory. ISO 15189 and ISO 17025 were approved as voluntary standards. The safety match standard was approved as mandatory.

12.19 Impact of GNBS programmes on the Guyanese Society

The GNBS with its twelve (12) work programmes and more so, its communications activities, has been disseminating a large volume of information to its stakeholders in industry, regulatory agency, priority sectors and to the general public. These education and sensitization activities have taken many forms and every opportunity has been utilized to ensure that the various target audiences are reached. Some of the current strategies used take the form of press releases, television programmes, press briefings, public consultations and symposia and weekly programmes in the print media.

However, measurable and accurate information regarding the impact of the Bureau's efforts have not been ascertained. It is very important that GNBS obtains the necessary feedback which will provide guidance regarding the way forward. Hence, there is urgent need for steps to be taken in the new year to secure technical expertise to execute this project which may take the form of a scientific survey.

12.20 Viewpoints

The Director of the Bureau of Standards is a monthly contributor to the radio programme "Viewpoint" which is aired from Monday to Friday each week on the Voice of Guyana. He recorded and aired twelve editions of this programme for 2004, covering topics pertaining mainly to the discipline of standardization. It was as a result of airing one such programme on the need for formal education in standardization that the coordinator of the Institute of Adult and Continuing Education (IDCE) approached the Bureau for collaboration in the putting together of a Introductory Standardisation course for stakeholders.

Other key topics which were addressed during the year included: "We should strive to be better quality citizens", "Public Sector procurement of Standards - Compliant goods", "Furniture Manufacturing – Specialise in a smaller number of products", "Priorities for the furniture Industry", "The image of the jewellery industry" and "Public perception of locally produced goods should be changed".

The airing of the monthly viewpoints on standards related matters is also serving to spread the message about the importance and relevance of standards to a wider cross section of the Guyanese society. This preparation and publication of the viewpoints would continue in the new year.

APPENDIX 1

STANDARDS APPROVED BY NATIONAL STANDARDS COUNCIL FOR 2004

STANDARDS DEVELOPED

- 1. Methods of sampling and testing for water and wastewater: Part 14 Phenols.
- 2. Methods of sampling and testing for water and wastewater: Part 21 Copper.
- 3. Methods of sampling and testing for water and wastewater: Part 24 Iron.
- 4. Specification for electrical appliances protectors.
- 5. Occupational safety and health management systems Specification with guidance for use.
- 6. Code of Practice on Occupational Safety and Health audit.
- 7. Specification for an abattoir.
- 8. Methods of sampling and testing for water and wastewater: Part 3 Biochemical oxygen demand five days (BOD₅)
- 9. Methods of sampling and testing for water and wastewater: Part 12 chlorine.
- 10. Methods of sampling and testing for water and wastewater: Part 16 Oil and grease.
- 11. Specification for drinking water.

STANDARDS REVISED

- 12. Specification for limes.
- 13. Specification for labelling of retail packages of cigarettes.
- 14. Specification for brown sugar.
- 15. Specification for labelling of protective helmets for road users.

APPENDIX 2

REGIONAL STANDARDS ISSUED FOR PUBLIC COMMENTS

- 1. Specification for poultry meats and poultry products.
- 2. Specification for grading and quality requirements for table eggs.
- 3. Specification for labelling of brewery products.
- 4. Specification for labelling of prepackaged goods.
- 5. Sampling and methods of analysis of sugars.
- 6. Specification for the identification of the contents of pipelines, piping, ducts and conduits.
- 7. Specification for steel nails.

APPENDIX 3

<u>CARICOM STANDARDS SUBMITTED TO THE MINISTRY OF TOURISM, INDUSTRY AND COMERCE TO BE APPROVED AS MANDATORY NATIONAL STANDARDS</u>

- 1. Carbonated beverages.
- 2. Specification for poultry meats and poultry products.
- 3. Information and documentation Records Management Part 1: General.
- 4. Information and documentation Records management Part 2: Guidelines.
- 5. Specification for safety matches.
- 6. Grading and quality requirements for table eggs.
- 7. Specification for rum.
- 8. Requirements for labelling of brewery products.
- 9. Specification for brewery products.

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MONTHLY EXPENDITURE STATEMENT			For Period En	dind: December	, 2004	D		
						1 - 0 - 0 - 0 - 0 - 0 - 0		
Programme Code:	5	6	7	8=(6+7)	9	10=8+9	11=5-11	12=
Chart of Accounts & Line Item	Y.T.D	Exp	Exp.	Total Exp.	liabilities	YTD	Bai. on	Bal.on
	Releases	Prev. Mth	Curr. Mth	to date	o/s-mth end	Exp & liab.	Releases	Voted Prov.
Total Statutory Expenses								
Total Statutory Emp. Expenditure								
011 Statutory Wages And Salaries								-10 10 20 12
012 Statutory Benefits And Allowance								
013 Statutory Pensions And Gratuities	4. 4.4							
Statutory Payment To D.P.F								
021 Payments to D.P.F								
Total Statutory Public Debt								
031 Public Debt - Internal Principles								
032 Public Debt - Internal Interest								
033 Public debt - External Interest								
034 Public Debt - external Interest								
TOTAL APPROPRIATION EXPENDITURE	62,947	56,122	6,838	62,960		60,512	(13)	
Total Employment Costs	54,069	46,230	6,140	52,370		52,370	1,699	
Total Wages and Salaries	40,918	34,871	5,138	40,009	- 1 - Ny -	40,009	909	
101 Admintrative	4,667	4,695	660	5,355	7.	5,355	(688)	
102 Senior Technical	4,090	3,014	397	3,411	-	3,411	679	
103 Other Technical & Craft Skilled	18,612	15,733	2,378	18,111		18,111	501	
104 Clerical And Office Support	7,120	5,787	786	6,573		6,573	547	
105 S/Skilled Operatives & Unskilled	2,641	2,203	401	2,604		2,604	37	
106 Contracted Employees	3,788	3,439	516	3,955	ATOL - C	3,955	(167)	
107 Temporary Employees	() () () () () () () ()			•		<u>.</u>		
OVERHEAD EXPENDITURE	13,151	11,359	1,002	12,361		12,361	790	
201 Other Direct Labour Cost	192	170	16	186		186	6	
202 Incentives	2.791.271				- VIII			
203 Benefits And Allowances	8,122	7,766	518	8,284	10,52	8,284	(162)	
204 National Insurance	2,363	2,265	215	2,480		2,480	(117)	
205 Pensions	2,474	1,158	253	1,411		1,411	1,063	
Revision of Wages and Salaries			. 7					
271 Revision of Wages Ans Salaries			18 W 1 E					7 60

Chart of Accounts & Line Item	Y.T.D	Exp.	Exp.	Total Exp.	ilabilities	YTD	Bai. on	Bal.on
	Releases	Prev. Mth	Curr. Mth	to date	o/s-mth end	Exp & liab.	Releases	Voted Prov
TOTAL OTHER CHARGES	8,878	9,892	698	10,590		8,142	(1,712)	
Expenses Specific to the Agency								
111 Expenses Specific to the Agency								
Materials, Equipment and Supplies	629	826	88	914		914	(285)	
121 Drugs and Medical Supplies	9	10	V, EST	10		10	(1)	
122 Field Materials And Supplies	10			B. 2 1 20 .	_	•	10	
123 Office Material And Supplie	610	783	88	871	-		(261)	
124 Print And Non - Print Materials		33		33		33	(33)	
Fuel and Lubricants	1,970	1,929	238	2,167		2,167	(197)	
131 Fuel And Lubricants	1,970	1,929	238	2,167	-	2,167	(197)	
Rental and Maintenance of Buildings	1,095	693		693		693	402	
141 Rental of Buildings	345	405		405	-	405	(60)	
142 Maintenance of Buildings	720	288		288		288	432	
143 Janitorial And Cleaning Supplies	30						30	
Maintenance of Infrastructure								
151 Maintenance of Roads								
152 Maintenance of Bridges								
153 Maintenance of Drainage & Irregation Wor	rks		au sausar					
154 Maintenance of Sea & River Defences								
155 Maintenance of Other Infratructure						* <u>E</u> E.,		
Transport, Travel and Postage	1,152	1,228	90	1,318	•	1,318	(166)	
161 Local Travel & Subsistence	555	296	40	336		336	219	
162 Overseas Conference & Official Visits	200000 2112 000 112 20 12						1	Administration of the Control of the
163 Postage, Telex And Cablegram	21	24	29	53	-	53	(32)	
164 Vehicle Spares And Services	576	908	21	929		929	(353)	
165 Other Transport, Travel & Postage	-	-		-	-	-		
								-

Utility Charges	3,034	2,388	60	2,448		2,448	586	
171 Telephone Charges	934	888	50	948		948	(14)	
172 Electricity Charges	2,100	1,500	100	1,500		1,500	600	
173 Water Charges		1,000		1,000		1,000	000	
Tro Trais, Charges								
Other Goods and Services Purchased	792	1,462	206	1,668		1,668	(876)	
		a care in	721 77				EV. 4 Person	
181 Security Services								
182 Equipment Maintenance	100	112	29	141		141	(41)	
183 Cleaning & Extermination Services		8		8		8	(8)	
184 Others	692	1,342	177	1,519	•	1,519	(827)	
Other Operating Expenses	206	1,366	16	1,382		1,382	(1,176)	
191 National And Other Events	30	40		40		40	(10)	V4-14-15
192 Dietary	30	40		40		40	(10)	
193 Refreshments	80	90		90		90	(10)	
194 Others	96	1,236	16	1,252	-	1,252	(1,156)	
Education, Subventions and Training				<u> </u>	-	-	**************************************	
211 Education Subventions & Grants								
212 Training (including scholarship)				-		- 1	-	- 100
Rates and Taxes and Subventions								W
221 Rates And Taxes								
222 Subventions To Local Authorities							(E.) Ta	
Subs.& Contribs.to Local & Int'l Orgs.		-	-			-		
231 Local Organisation								
232 International Organisations .				-	-	-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1. 1.2
Refunds of Revenue								
241 Refund of Revenue								
Pensions								31
251 Non-Pensionable Employees				AVV				
252 Pension Increase	A CARLED							
253 Old Age Pensions & Social Assistance				E 9)				e describ
261 Other Public Dept (Appropriation)					ous d			
							2003 -	1-05
ACCOUNTING OFFICER					DATE			
			Sala D					