

**GUYANA NATIONAL BUREAU OF STANDARDS
(GNBS)**

ANNUAL REPORT

2005

**Guyana National Bureau of Standards
National Exhibition Centre
Sophia
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VISION OF GNBS

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

Standardisation can be defined as an activity which provides solutions to problems essentially in the spheres of science, technology and economics, aimed at the achievement of the optimum degree of order in a given context.

Generally, the activity consists of the processes of formulating, issuing and implementing standards. An important benefit of standardization is improvement of the suitability of goods and services for their intended purposes.

This activity of standardization can make a significant contribution to improving the quality of life of the people in the country.

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".

The VISION of the GNBS can be achieved through the implementation of the MISSION Statement. This statement spells out the different work programmes of the Bureau, targeting consumer protection and advancement of trade. The consumer protection programme activities involve the verification of weights and measures, monitoring the quality of local and imported commodities and investigation of consumers' complaints. The trade-support activities are focused on a range of conformity assessment sub-programmes and information services.

MEMBERS OF NATIONAL STANDARDS COUNCIL 2005

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. 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.	Ms. Jewel Sears	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.

The National Standards Council is the Governing Board of the GNBS dealing with policy matters. The Board was reconstituted with effect from July 01, 2005 with essentially the same members, excepting Mr. Dhanpaul Dhanraj from The Guyana Rice Millers & Exporters Development Association. Also, Ms. Jewel Sears replaced Mr. Lee Van DeSantos who resigned from the Food and Drugs Department. The Board Members meet on a monthly basis and monitor the work of the GNBS. A comprehensive monthly report is submitted to the Council by the Executive Director. Board members are also responsible to chair and manage Standards Development Technical Committees in the preparation of standards for the different sectors of the economy. Reports are also submitted by Council Members to the meeting, which are captured in the minutes of the meetings.

EXECUTIVE OFFICERS

(Management Team)

Dr. Chatterpaul Ramcharran	-	Executive Director
Mr. Anthony Ross	-	Head, Conformity Assessment Department
Ms. Evadnie Enniss-Fields	-	Head, Information Services Department.
Ms. Charmain Niles	-	Head, Administration and Finance Department .
Ms. Shune Vickerie	-	Coordinator, Standardisation Department.
Ms. Candelle Walcott-Bostwick	-	Coordinator, Laboratory Services Department.
Mr. Shailendra Rai	-	Chief Inspector, Metrology and Compliance Department.

DEPARTMENTS/WORK PROGRAMMES

* Metrology & Standards Compliance Department	-	Weights & Measures (Legal Metrology)
	-	Standards Compliance (Import quality)
* Laboratory Services Department	-	Laboratory Certification
	-	Calibration activities.
* Standardisation Department	-	Standards Development
	-	Standards Promotion & Implementation
	-	Regional & International activities.
	-	Codex activities
* Conformity Assessment Department	-	Technical Assistance
	-	Product Certification
	-	Audit Service
	-	Inspection & Certification
	-	Accreditation activities.
* Information Services Department	-	Communication
	-	Metrication
	-	Standards Information
	-	Information Technology
* Administration and Finance	-	Administration
	-	Finance

EXECUTIVE SUMMARY

HIGHLIGHTS OF ACHIEVEMENTS FOR 2005

During the year 2005, The Guyana National Bureau of Standards(GNBS) continued relentlessly to promote standardization and quality systems in Guyana through six (6) Work Programmes in order to facilitate local and foreign trade, industrial development and consumer protection. During 2004, the work of the GNBS was reported under twelve (12) Programmes, but these have been consolidated or reorganized into six (6) Programmes in 2005 in order to strategically streamline the operations to support free trade, and the CSME, and to meet Guyana's obligations under the WTO/TBT Agreement.

The Management Systems Department has been relabelled as Conformity Assessment Department and the various work programmes in the said Department have been brought as components of Conformity Assessment, viz, Product Certification, Laboratory Certification, Audit Service, Quality and Environmental Management. Similarly, the Information Services Programme now embraces Communication, Metrication, Standards Information and Information Technology.

In the aggressive pursuit of its mission and vision, the GNBS made a number of notable achievements as listed below. It is believed that the various stakeholders of GNBS, including manufacturers, importers, retailers, vendors and consumers have become more aware of the importance of standards, and are making the requisite adjustments to put systems in place in order to comply accordingly.

(1) Legal Metrology (Weights and Measures)

The GNBS completed the verification of new, locally-manufactured and imported devices submitted for testing during the year, resulting in a quantity of 969 scales, 2,141 masses, 586 measures and 222 metre rules tested for accuracy, while 3,679 electricity meters were also initially verified. For subsequent verification, 6,391 scales, 12,093 masses, 387 measures and 7 storage tanks were tested for accuracy. At filling stations, 1,197 petrol pumps, 15 bulk meters and 33 wagon compartments were calibrated. Inspectors also conducted surveillance activities and visited 5,151 stalls/premises countrywide, to ensure that all weighing and measuring devices used in commercial trade were tested and stamped. During these surveillance exercises, 950 scales, 1309 masses, 237 measures and 172 rules were seized and removed. These services of the GNBS are pivotal in providing consumer protection and equity in trade. They ensure that all devices used in official and legal business activities are accurate and are in an acceptable working condition.

The GNBS successfully continued its collaboration with the Regional Administration of Nos. 2,3,4 & 6 in maintaining the Weights and Measures Offices and implementing the work programme. In addition, Offices were re-established and Officers appointed in Region Nos. 5,7 & 10. The remaining Regions 1,8 & 9 would be addressed early in the new year. An outreach programme had also started in the last quarter of the year to provide a service (weights and measures and metrication activities) to the Amerindian communities of Orealla, Siparuta, Moraikobai and St. Cuthbert's Mission.

(2) Standards Compliance

Under this programme, some twenty-five (25) categories of imported or locally manufactured commodities falling under the purview of the GNBS were monitored for compliance to national standards. The importers and manufacturers of these commodities registered with the Bureau, so that Inspectors carried 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 115 importers, 51 used-tyre dealers and 14 local manufacturers were registered with the GNBS for the importing, retailing and manufacturing of commodities monitored by the GNBS.

In addition, a total of 1,333 surveillance inspections and 420 other inspections were conducted either at ports-of-entry, bonds/warehouses or manufacturers premises. A total of 73 periodic inspections were conducted at tyre premises and retail outlets with 663 defective tyres destroyed. Also, 269 inspections were carried out at importers' bonds/warehouses, and numerous containers of various commodities were placed on hold due to inadequate labelling.

During December, with the intervention of Cabinet, the GNBS was able to forge collaboration with the Customs and Trade Administration to put a system in place to monitor the quality of imports.

During the year, 103 consumers' complaints were received predominantly on electrical appliances and cell phones. Ninety (90) of the complaints were favourably resolved.

(3) Laboratory Services

During the year, Laboratory Services Department provided calibration services to industry, as 75 masses, 4 comparators, 3 volumetric measures, 2 provers, measuring tapes, calipers and micrometers were calibrated. The Department acquired a complement of temperature equipment to conduct temperature calibrations between - 40⁰C to 300⁰C. An hydraulic comparator was also purchased for pressure calibration up to 3000 bar. These services would be offered in the new year.

Regarding certification of laboratories, 24 (medical) submitted 23 quality manuals and 61 technical manuals. These manuals have been reviewed in relation to the national standard, and comments made accordingly. The corrected manuals have to be resubmitted.

(4) Conformity Assessment

The GNBS/CPEC Project on ISO 9001:2000 culminated in 2005 with six of the eight companies becoming compliant to the standard. These companies were GNSC, GNIC, AES, Kayman Sankar & Company Ltd., Edward Beharry & Company Ltd., and Guysuco. Subsequently, Edward Beharry and Guysuco have since been certified by SGS. The two companies that did not complete the process (Guyana Stockfeeds Ltd and Denmor) along with Caricom Rice Mills are being provided with support to complete the process. With the support from Guyana Trade and Investment, four companies (GNSC, GNIC, AES, Kayman Sankar & Company Ltd.) will be provided with 66% of the registration cost by the funding agency.

The GNBS provided support to 11 Micro and Small Enterprises who are members of Empretec to develop Business Manuals meeting the requirements of the GYS 231. This standard is a stepping stone for eventual ISO 9001/14001 registration and is aimed at improving the competitiveness of these small businesses.

The GNBS launched its Audit Service Programme in February 2005 in order to provide third part evaluation for the management systems that would have been established by the companies or agencies. The standards audited against are ISO 9001:2000, ISO 14001:2004, ISO 17025, GYS 170 and GYS 231. Audits have been completed for Banks DIH, BACIF, DIDCO, GPL, Guysuco and Demerara Power Company.

The GNBS established Inspection and Certification Working Groups, where the GNBS worked with Inspection and Certification Agencies to develop **Quality Systems** as part of the development of Guyana's **National Conformity Assessment Infrastructure meeting the requirements of ISO 17020:1998 and the ISO Guide 65:1996.**

These agencies have completed four months of training in the interpretation and application of the relevant standard and are in the process of preparing quality manuals for their operations.

The GNBS has taken the initiative to have its Product Certification Scheme accredited to the international standard **ISO/IEC Guide 65: General requirements for bodies operating product certification systems** so that clients would have more confidence in the GNBS operating as a third party certification body and certified products would also be internationally recognized. The necessary manuals and procedures have been developed.

The GNBS on August 18, 2005 launched a campaign for the promotion of the Product Certification Programme. The Programme aimed at promoting the current clientele on the scheme and enhances consumer awareness about the benefits of product certification.

Based on the twenty (20) audits that were scheduled for 2005, 90% were completed. An average of 2 audits were conducted per client. All certificates were renewed after successful renewal audits. During the audits that were done, minor nonconformances and opportunities for improvement were highlighted to the clients. Surveillance had been minimal for clients with no nonconformances. Routine surveillance and renewal audits were conducted with holders of the GNBS Standards mark to ensure the continued compliance to the relevant standards.

(5) Standardisation

During the year 2005, the GNBS continued to produce only priority needed standards. Twenty-seven (27) national standards (13 formulated, 9 revised and 5 adopted) and six (6) proposals for the development of national standards were approved by National Standards Council. The total amount of standards produced by the GNBS to date is 322.

A bill was prepared by the GNBS in collaboration with the Attorney General Chambers to give effect to the Inter-Governmental Agreement establishing the Caricom Regional Organisation for Standards and Quality (CROSQ). Following Cabinet's approval, the bill was forwarded to and approved by Parliament thus giving the CROSQ's operations the force of the laws in Guyana.

National Codex Committee meetings were held to review documents tabled at the Codex Committees on Fish and Fishery Products, and Food Labelling.

(6) Information Services

The Communication Division continued to provide critical programme support to the technical departments of the Bureau in the form of promotional campaigns, live television and radio programmes, editing printed materials, advertisements, producing and designing printed materials, arranging press briefings, symposia and graduation ceremonies etc.

During this year, the Division launched and executed promotional campaigns for the Standards Mark Scheme and the metrication programme using mass media advertisements, brochures and posters.

By the end of the year, thirty- five (35) editions of Standards Corner, forty- four (44) editions of Standards Advisory, fifty- two (52) notices and 27 press releases were published as the Bureau intensified its public education programme.

Nine (9) press briefings highlighting matters such as the national building codes, the quality of used tyres, standards approved by the Standards Council and the implementation of the new system was held to date.

The Division was also able to make three regional visits to Regions number 2, 7 & 10 in its bid to educate stakeholders in the Administrative Regions and obtained valuable feedback concerning the impact of the GNBS programmes.

Secondary School Students, members of the various Chambers and the public at large were targeted through lectures, meetings and live television programmes.

The **Technical Standards Information Unit (TSIU)** provided information to staff, university students, school children, clients and stakeholders, so that they were more equipped in their research preparations in a timely and efficient manner. Patrons had access to over 364 reading materials that were valuable and informative. This section implemented the catalogue card system which gave leverage to traceability of documents. The department launched its 2005/2006 standards catalogue and sold 138 standards which represented a total of six hundred and eighty six thousand, seven hundred (686,700.00) dollars.

IT programme is one of the programmes under the Information Services Department. It provides backup support services such as minor repairs to hard ware and soft ware, virus scans, adding client computers to the network, backing data, sharing files and folders to all staff.

During the year, a new Dell server and a copy of windows server 2003 software were acquired to improve the efficiency of the network as it enabled more users to have access to the network. The Bureau also introduced its Digital Subscriber Line (DSL) internet connection for faster access and downloads to the internet. This replaced the dial- up service.

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 2005, 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 six (6) 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 in-house 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 PROGRAMME (Weights and Measures)

The main activities undertaken this year under the Legal Metrology (Weights and Measures) Programme included the initial verification of devices manufactured locally and imported to determine compliance with manufacturing and importation requirements and accuracy prior to use i.e., the inspection and testing of new scales, weights, measures and metre rules before they are approved to be used in commerce. Included also, is the subsequent verification of devices twice yearly, to ensure accuracy is maintained i.e., the inspection and testing 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 GNBS and Weights and Measures Offices of the ten (10) Administrative Regions; surveillance of devices at sale outlets to ensure consumer protection; licensing of local manufacturers; metric sensitization of stakeholders and facilitation of the conversion of imperial devices to metric.

Further, other activities such as external training for Sugar estates, attending meetings and the investigation of complaints relating to short weight at rice mills, which were not included in the work programme for 2005 were conducted, based on requests from stakeholders.

1.1 Licensing of Manufacturers of Weighing and Measuring Devices.

For the year 2005, a total of five (5) manufacturers were licensed with the GNBS to manufacture scales and masses, and to convert devices from imperial to metric units, as compared with six (6) manufacturers of scales and masses for 2004, nine (9) for 2003, and eight (8) for 2002. Also, two (2) manufacturers of measures were licensed for 2005 and 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 determine compliance with the manufacturing requirements i.e. the examination of their facilities and tools used in their operations, quality control techniques, manufacturing standards, test masses and calibration scale, prior to the issuing of manufacturing licences. In addition, quarterly inspections were conducted to ensure that requirements were maintained.

Based on periodic 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 of Region #2 sold scales rejected by the GNBS, which bear false GNBS stamps to a store in Linden. As a result, the scales were seized and the manufacturer was instructed by the GNBS to discontinue the manufacturing of devices. This decision was taken in light of the fact that he is not a licensed manufacturer with the Bureau, since he was operating with his parent's licence and was previously warned for similar mal-practices by the GNBS. Generally, devices manufactured locally by licensed manufacturers were submitted to the GNBS for verification prior to sale.

Manufacturers of devices continued to express concerns regarding imported devices that are being offered for sale in both metric and imperial units, since the sale of these scales is creating unfair competition for them, who are required to manufacture only metric devices. As a result, Inspectors of the GNBS carried out surveillance inspections at sale outlets during the year and most of the devices found were stamped by the GNP. 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. As a result, the GNBS is only verifying metric devices. Devices in imperial units or dual mode are required to be converted to metric, prior to verification by the Bureau. It is recommended that only metric devices be manufactured and imported to be used in trade, since the metric system is the only legal system of measurement in Guyana.

1.2 **Initial verification of imported and locally manufactured devices.**

The initial verification of devices (new) involves the inspection and testing of devices, imported or locally manufactured, to ensure compliance with the manufacturing or importation requirements and to determine accuracy. Devices initially verified during the year were mainly submitted by Importers and local manufacturers registered with the GNBS.

1.2.1 **Scales, masses, measures and metre rules**

Resulting from initial verification exercises conducted during the year 2005, a total of 969 scales, 2141 masses, 586 measures and 222 metre rules were initially verified. **Figure 1. below shows** the monthly initial verification of devices for 2005, which indicates that there has been a fluctuation in the number of new devices verified throughout the year based on the demand for same. During the months of February, March, June and July a significant amount of devices were submitted for verification.

Figure I

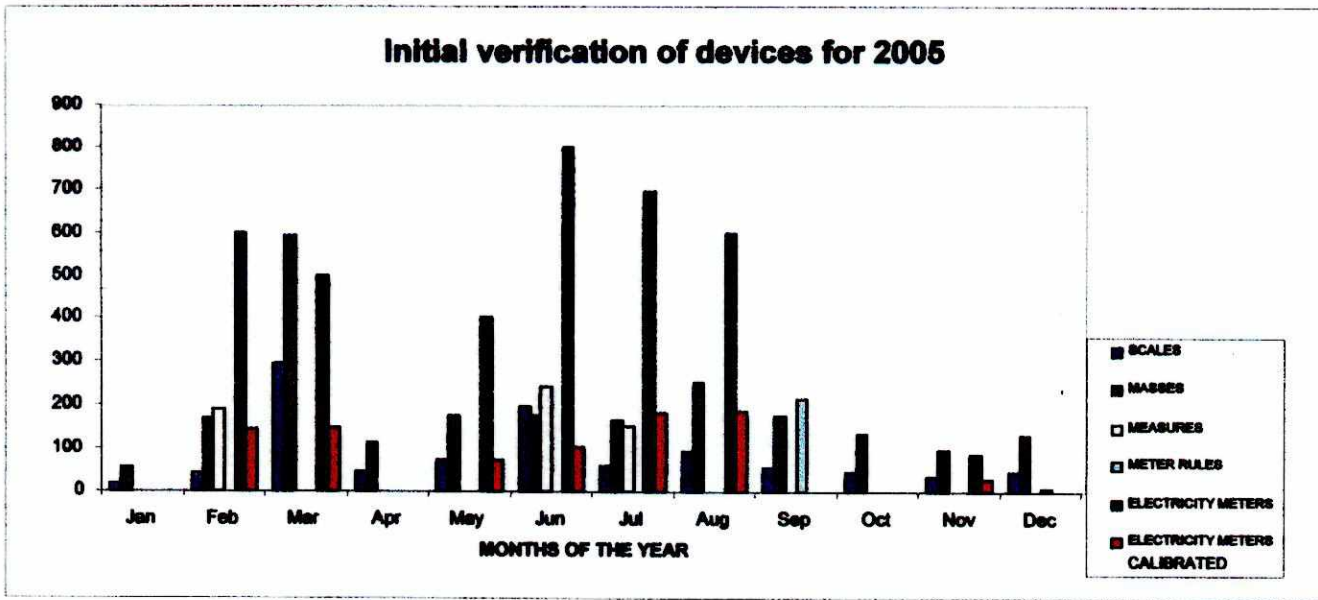


Table 1. below shows a comparison of devices initially verified for the years 2001 to 2005. There has been a slight increase in the number of scales and masses verified this year, as compared with the year, 2004. Also, there has been an increase in the number of measures and metre rules initially verified, which is due to increased awareness of dealers, vendors and shopkeepers, and intensive surveillance inspections carried out by Inspectors of the Bureau during the year, to remove all defective and unstamped measures and metre rules used at sale outlets.

However, there has been an overall decrease in the number of scales and masses initially verified over the past five years when compared to previous years, which is mainly due to a decline for same on the market. Most vendors were already in possession of metric devices and those with imperial devices were moving to convert these devices to metric instead of buying new ones.

Table 1
Initial verification of devices

Years	Scales	Masses	Measures	Metre Rules
2001	1867	3227	541	-
2002	1029	2094	512	-
2003	1128	2087	298	31
2004	940	1951	344	303
2005	969	2141	586	222

Rejected devices were returned to manufacturers for rectification and further adjustments and were subsequently verified. Non-conformities identified during verification were highlighted to manufacturers at the time of submission of devices for verification to prevent a re-occurrence of same in the future. In situations where the devices could not be rectified, the devices were scrapped and reworked by the manufacturers.

There is need for importers of devices used in commercial trade to comply with the requirements for the importation of devices. In situations, where practicable, samples of devices should be submitted to the GNBS for type approval prior to importation. Further, devices imported should be accompanied with type approval certificates and must be initially verified by the GNBS prior to sale. During the up-coming year, the GNBS will intensify inspections at the ports-of-entry and at sale outlets to ensure that devices imported and offered for sale are verified by the Bureau as required. Devices found to be unstamped would be seized and dealers would be prosecuted. There is need for stronger penalties to be instituted on importers, dealers and manufacturers found selling unverified devices used for commercial trade.

1.2.2 Electricity Meters

The verification of electricity meters imported for GPL continued during the year by the GNBS, as a result of the acquisition of the six station single phase electricity meter test bench in 2004 by the GNBS. The execution of this activity has become necessary due to numerous complaints made by consumers regarding inaccurate and defective meters installed by GPL, which have resulted in inaccurate readings. For the year, the Bureau was successful in verifying a total of 3679 electricity meters of which 868 had to be calibrated, since they were inaccurate. There has been a significant increase in number of electricity meters verified for 2005 as compared with the previous year, where 728 were tested of which 222 were calibrated. This is primarily due to the continuous acquisition of meters by GPL in order to reach the existing demand of consumers and the Government extensive Rural Electrification Programme. However, it was recommended that the GNBS should acquire another Test Bench to conduct the verification of 110V single and double phase electricity meters in the near future, since these meters are not currently being checked by the GNBS for accuracy, prior to installation at consumers' premises.

1.3 Subsequent verification of devices

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 used at markets, shops, hospitals, clinics, health centres, post offices, airlines, shipping agencies, fisheries, supermarkets, sugar estates, rice mills and other industries was conducted at the GNBS Head Office, Sophia Exhibition Site, Weights and Measures offices countrywide, at the Bureau's Branch offices in Regions 2 and 6, at clients' premises, and 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, as required by the 1981 Weights and Measures Act, in order to ensure consumer protection and equity in trade.

1.3.1 Verification of scales, masses and measures

A total of 6391 scales, 12093 masses and 387 measures were subsequently verified for the year 2005. **Figure 2.** shows the monthly subsequent verification of devices for 2005 which indicates that during the month of February the highest amount of scales and masses were verified, followed by March, July and August. The scheduled verification periods (January to March and July to September) were responsible for the increase in the number of devices verified during these months.

Figure 2

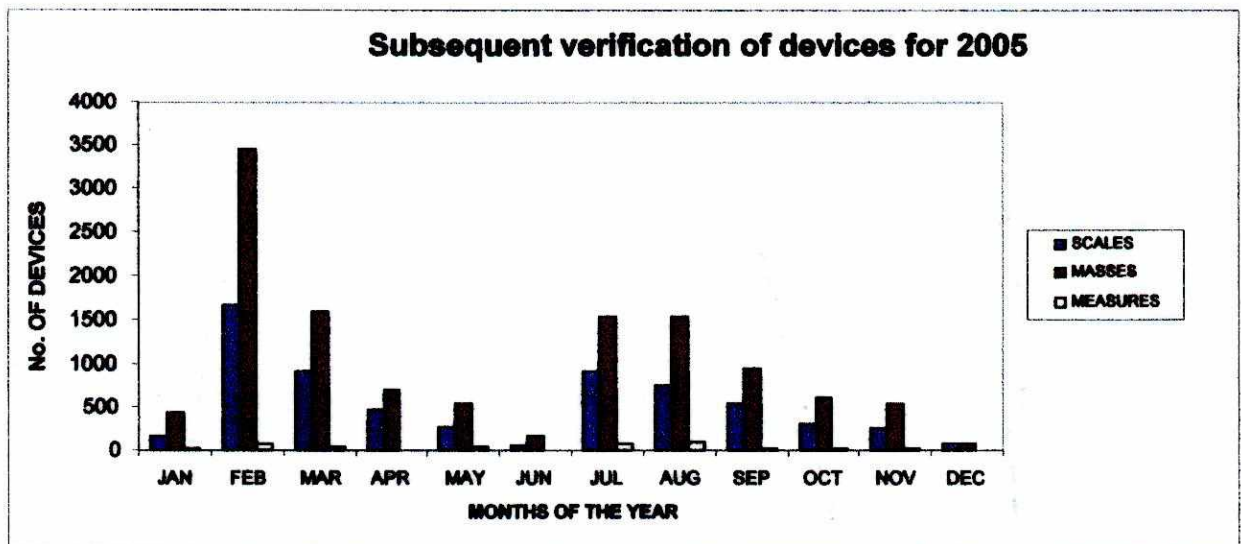


Table 2. below shows a comparison of devices subsequently verified for years, 2001 to 2005. There has been a significant increase in the number of scales and masses subsequently verified as compared to the previous years, while there was a decrease in the number measures verified. This increase is attributed to the comprehensive mobile stamping exercises conducted countrywide and intensive weights and measures surveillance inspections conducted at shops and markets during the periods of April to June and October to December, for the first and second half of the year, respectively. This resulted in the seizure of all unstamped and defective devices, which were subsequently repaired, verified and returned to vendors and shopkeepers. The decrease in the number of measures verified is as a result of the lack of cooperation of vendors and shopkeepers to acquire metric measures and to weigh solids instead of measuring same.

There is need for better cooperation from stakeholders in submitting their devices for verification twice yearly, as required by the Act. In addition, urgent attention must be given to the revision of the 1981 Weights and Measures Act and the development of Regulations for the said Act. This is necessary, since the existing penalties are too small and vendors and shopkeepers are capitalising on the situation by cheating consumers through the use of unverified and defective devices, which is affecting the effectiveness of the programme.

The subsequent verification of devices used in trade has impacted significantly on commerce since at least 90% of devices in use were verified thus ensuring that consumers receive the correct quantities of goods purchased.

Table 2
Subsequent verification of devices

Year	Scales	Masses	Measures
2001	418	3217	12
2002	3360	7151	515
2003	4812	8427	932
2004	5722	11208	599
2005	6391	12093	387

1.3.2 Verification of Weighbridge Scales

Based on the acquisition of the test truck and ten metric tonnes of large capacity masses from the 2004 capital budget, the Bureau was successful in verifying 6 of the 10 weighbridge scales used at sugar estates, 30 of the 34 weighbridge scales used in the rice industry and 17 of the 20 known weighbridge scales used in the other industries, for the first and second half of the year, respectively, as compared with a total of 51 verified for 2004 and 44 for 2003. The remaining 11 scales were not verified this year primarily since they were either defective or were not in use. The increase in the verification of weighbridge scales had resulted from the acquisition of the GNBS test truck and masses, which facilitated the execution of this activity in an effective and timely manner, as compared with the previous situation of renting trucks and masses to conduct verification exercises. However, some of the major challenges encountered by the GNBS in the execution of this activity during the year were the unavailability of funds to conduct surveillance checks at rice mills in Regions # 2 and 6 during the rice crop season, the tampering of scales by some millers to cheat farmers and the conversion of mechanical weighbridge scales used by some millers to digital, in order to ensure transparency in the rice industry. The verification of all weighbridge scales used in commercial trade has become necessary due to numerous complaints received from farmers and other consumers regarding short weight in commerce and requests from some stakeholders to have their scales verified by the GNBS. This activity would ensure equity in trade and consumers satisfaction, which is vital for the effective functioning of industries operating in Guyana.

In addition, the use of inaccurate scales could result in the substantial loss of revenue and the dissatisfaction of external buyers which could adversely affect trade.

1.3.3 Verification of Petrol Pumps and Other Volumetric Devices

A total of 1197 petrol pumps, 33 wagon compartments, 7 storage tanks and 15 bulk meters were tested of which, 378 petrol pumps were calibrated for the various petrol companies and private stations countrywide for the first and second half of the year, 2005. **Figure 3.** shows the monthly verification of petrol pumps for 2005 which indicates that most of the pumps were verified mainly during the verification periods of the first and second half of the year.

Figure 3

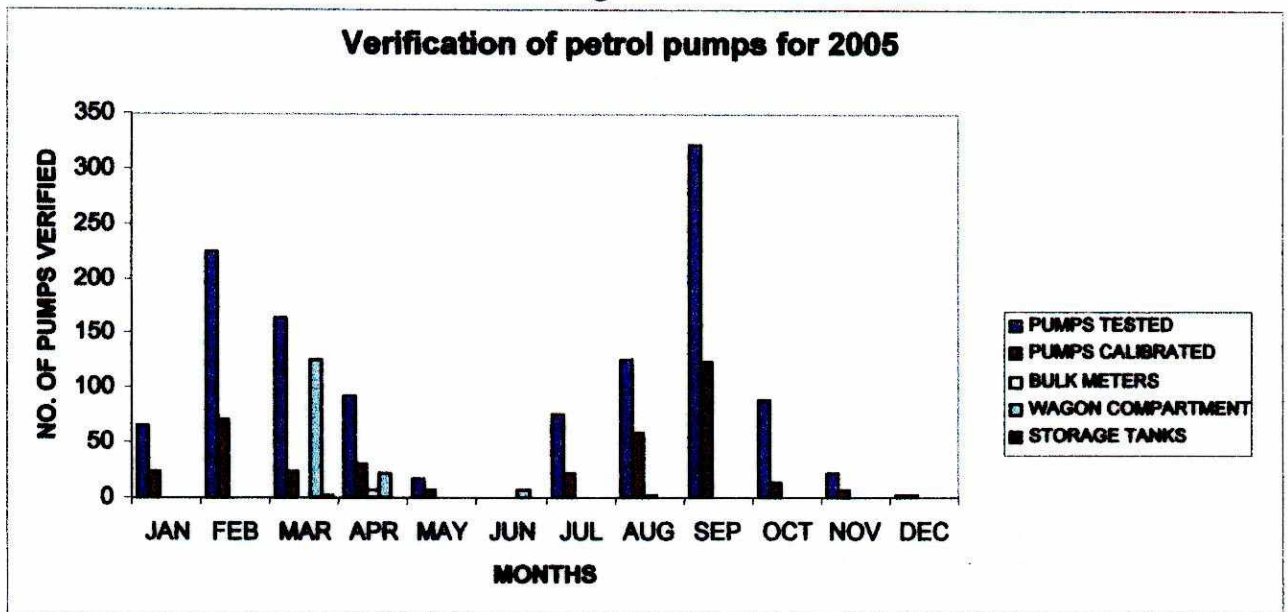


Table 3. below shows a comparison of petrol pumps, bulk meters, wagon compartments and storage tanks verified for the years, 2001 to 2005. There has been a fluctuation in the number of petrol pumps, storage tanks and bulk meters verified annually over the last five years. However, there was an increase in the number of pumps tested for 2005 as compared with 2004. The fluctuation in the number of devices verified annually could be attributed to the opening and closing of service stations by companies and private owners over these years. The verification of storage tanks was carried out based on requests from stakeholders, while the verification of wagon compartments was conducted as a result of complaints received from petrol dealers regarding inaccurate quantities of products purchased.

The verification of petrol pumps twice yearly has impacted significantly on vehicle owners since at least 98% of petrol pumps in use were verified thus ensuring that they receive the correct quantities of fuel purchased from service stations.

Non-conformities relating to safety and the general operation of service stations 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 in most situations. Checks were also conducted at service stations during the year to ensure that products were advertised and sold in metric quantities.

There is need for petrol companies and private owners of petrol stations to replace defective and old pumps that are still in use at stations. This is necessary since these pumps tend to become inaccurate within a short period of time, and are difficult to adjust during verification. In addition, pumps are required to be properly labeled with the total sale, price per litre and volume in order to provide guidance to consumers when purchasing products. Further, products must be advertised and sold in metric quantities, since pumps are verified and are operating in metric units.

Table 3
Verification of petrol pumps

Years	Pumps Tested	Fuelling Calibrated	Bulk meters	Wagon Compartments	Storage Tanks
2001	1090	695	33	-	-
2002	1093	484	5	-	-
2003	1191	308	14	-	17
2004	1139	380	5	-	7
2005	1197	378	15	33	7

1.3.4 Calibration of Working Standards

The master meter for the 6 station electricity test bench was sent to the Jamaica Bureau of Standards for calibration during the year, since the calibration period of the said meter had expired. In addition, the 10, 20 and 500 kg working standard masses and the 20 kg mass kits used by the GNBS and the Regions to carry out the verification of devices for stakeholders were calibrated in house in order to maintain accuracy and traceability to international standards.

1.3.5 Acquisition of a 2000L Test Measure

The Bureau was successful in acquiring capital from its 2005 budget to purchase a 2000 L test measure to facilitate the verification of bulk meters and wagon compartments used by petrol companies at the terminals. The acquisition of this test measure is necessary in order

to address concerns raised by the Guyana Petrol Station Dealers Association relating to the inaccurate quantities of product purchased by dealers from parent companies. The measure was purchased from the Western Scientific Co. Ltd in Trinidad and is expected to arrive in Guyana shortly. The verification of bulk meters and wagon compartments using the 2000L test measure is expected to commence in 2006.

Further, the 2000L test measure is necessary, since the 500L test measure acquired by the Bureau in 2004 to conduct the verification of bulk meters and wagon compartments had proved to be inadequate to carry out the testing of large bulk meters due to their high flow rate. However, the 500L was used by the GNBS to verify smaller bulk meters and storage tanks at companies during the year.

1.4 Surveillance inspections

Inspection activities to ensure devices used for trade were stamped and in good condition were conducted during the periods April to June for the first half of the year, and October to December for the second half of the year. During these exercises carried out, a total of 5151 premises/stalls were visited for the year 2005.

Resulting from surveillance exercises conducted at markets and shops, a quantity of 950 scales, 1309 masses, 237 measures and 172 rules were seized and removed, since they were found to be unjust or defective. **Table 4.** shows a comparison of Weights and Measures surveillance inspections conducted for the years 2001 to 2005. There was a decrease in the number of surveillance inspections carried out in 2005 when compared with 2004, since more emphasis was placed on the verification of devices.

However, there was a significant increase in the number of scales seized during the year 2005, as compared with the previous years, which is mainly due to the reluctance of vendors and shopkeepers to have their devices stamped twice yearly. Further, measuring rules seized during the year was as a result of intensive surveillance inspections carried out by Inspectors at stores based on complaints received by the GNBS from consumers regarding the use of defective and unstamped rules.

Despite significant efforts made by the GNBS over the years to ensure that devices used in trade are verified periodically and are kept in good condition in order to ensure accuracy and equity in trade, some vendors and shopkeepers are not verifying their devices and properly maintaining them as required. As a result, these devices become inaccurate, although they were stamped for the corresponding period. Therefore, there is need for better cooperation from vendors/shopkeepers in having their devices stamped twice yearly as required by the 1981 Weights and Measures Act, and for stronger penalties to be instituted against persons found to be in possession of defective and inaccurate devices. This is dependent on the revision of the 1981 Weights and Measures Act and the development of Regulations under the said Act.

Table 4
Weights and Measures surveillance of devices

Years	No. of premises visited	Scales	Masses	Measures	Rules
2001	397	84	367	129	-
2002	3511	219	1016	176	-
2003	3891	273	1405	237	-
2004	6267	641	1697	405	-
2005	5151	950	1309	237	172

1.5 National Weights and Measures Monitoring Committee Meetings

Monthly meetings of the National Weights and Measures Monitoring Committee which 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 were held as scheduled throughout the year at the GNBS, with the exception of January due to the extensive flooding in the country and December, being the last month of the year. The objective of these meetings was to facilitate open discussions on matters relating to weights and measures and metrication activities and to obtain direct feed back from Officers on activities executed in the Regions. Officers who attended the meetings provided feedback concerning the progress of activities conducted in the Regions for the various months, according to the National Work Programme and reported on problems encountered during the execution of their duties in the Regions.

In addition, work to be executed during the following month was scheduled and discussed at each meeting and difficulties encountered by Officers with the Regional Administrations were continuously highlighted at these meetings. Some of the concerns raised by Officers were the absence of transportation to carry out field activities, the absence of appropriate facilities to conduct the stamping of devices and the appointment of full time Weights and Measures Officers in some Regions. However, there was no participation from Regions #1, 8 and 9 at the meetings, despite repeated representations made by the GNBS to the Regional Administration of these Regions to appoint designated Weights and Measures Officers, in order to provide Weights and Measures services to the people of the Regions. The absence of designated Weights and Measures Officers in Regions #1, 8 and 9 demonstrates the lack of cooperation and support of these Administrations for the Weights and Measures Programme. There is need for these Administrations to provide the necessary personnel, facilities and resources necessary to facilitate the execution of Weights and Measures and Metrication activities in the Regions, which is vital for consumer protection and equity in trade.

1.6 Sensitisation activities

Inspectors of the GNBS and Weights and Measures Officers in the Regions were tasked with the responsibility of sensitizing vendors, shopkeepers and other retailers on the need to have their devices stamped twice yearly, 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 label them with the quantity and price, prepare price lists, weigh instead of measure solid products, conduct practical demonstration on the use of metric scales, masses and measures and the distribution of flyers and conversion charts. Resulting from these exercises, a total of 2,921 premises were visited and a quantity of 39 scales were converted and verified by the Bureau for 2005, as compared with 37 for 2004, 39 for 2003, and 42 scales and 14 masses for 2002 by licensed manufacturers.

Feedback obtained from shopkeepers and retailers during sensitization activities revealed that 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. There is need for more education and cooperation of consumers regarding the application and use of the metric system in their every day lives. In addition, the passing of the omnibus bill by Parliament is essential to facilitate the use of the metric system by all sectors of the economy.

1.7 Outreach programme.

During the year, the Director, Chief Inspector and a Senior Inspector visited St. Cuthbert's Mission, Orealla/Siparuta and Moraikobai on 2005-10-25, 2005-11-10 and 2005-11-29, respectively, as part of the Bureau's Out Reach Programme to sensitize persons living in the Hinterland Regions on the activities conducted by the GNBS and its role in consumer protection. During the visits conducted, meetings were held with the Captains and Councillors of the villages and some 21 shopkeepers in St. Cuthbert's Mission, 14 in Orealla/Siparuta and 5 in Moraikobai were sensitized on the requirements of the Weights and Measures Programme, care and use of devices and the use of the metric system. The GNBS is expected to re-visit these missions to conduct follow-up inspections, periodic verification of devices and metric seminars for the business community and other stakeholders.

In addition, a metrication seminar was held with 35 school children and 40 shopkeepers and other villagers in Moraikobai to sensitise them on the requirements of the Weights and Measures Programme and the use of the metric system. During the seminar, practical demonstrations were conducted to show participants how to think metric. Further, a visit

was conducted to the Moraikobai Hospital where scales in use were examined and the Medex was advised on the requirements for verification and use.

1.8 Revision of 1981 Weights and Measures Act and the development of Regulations

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. As a result, the GTIS was approached during the year with a project proposal and approval was granted for a Consultant to review the technical content of the said Act and make the necessary changes in keeping with international metrological requirements. Also, the necessary Regulations would be developed for the said Act, and a legal Consultant to address the legal aspects of the project. The GNBS in collaboration with GTIS, is in the process of sourcing Consultants to execute the project. This project is expected to commence in the first quarter of 2006.

1.9 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 their awareness of activities conducted by the Department.

Further, notices were published to remind vendors, shopkeepers and other users of weighing and measuring devices to have their devices verified at the respective weights and measures offices and during mobile stamping exercises conducted during the periods January to March and July to September for the first and second half of the year 2005, respectively.

The Department also participated in the National Quality Week and Guy-Expo events, where activities conducted under the Weights and Measures programme, and their role in consumer protection were featured, and concerns raised by consumers were adequately addressed.

1.10 Collaboration with Regional Administrations.

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 carried out throughout the year. However, despite efforts made by the Bureau during the year 2002, 2003 and 2004 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, 8 & 9 during the year, 2005, since there were 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 W & M Monitoring Committee Meetings. However, some verification and surveillance activities were conducted in Regions 5 and 10.

Based on continuous consultations with the Regional Administration of Regions # 5, 7 & 10 and representations made to the Public Service Ministry (PSM) by the GNBS, to effect the employment of W&M Officers and to re-establish the Weights and Measures Offices in these Regions, the respective Administrations were successful in obtaining approval from the PSC for the employment of W&M Officers. As a result, these Officers were appointed by the Regions, subsequently trained by the GNBS, and are currently executing Weights and Measures and Metrication activities in the Regions.

1.11 Complaints

1.11.1 Accuracy of Totaliser Readings.

A visit was conducted by the Director and Chief Inspector to Steve's Service Station on 2005-08-30 to investigate a complaint regarding inaccurate totaliser readings. Based on checks conducted it was observed that the totalisers on the pumps were reading in whole numbers and sales made in fractions of a whole number were not recorded. As a result, a letter was sent to the company advising them to address this matter urgently.

A subsequent visit was conducted by the Chief Inspector and a Senior Inspector to Steve's Service Station on 2005-09-13 to further investigate the complaint made by the proprietor regarding inaccurate totaliser readings. Based on checks conducted by the GNBS Inspectors along with the Texaco Service Technician and a Sales Representative, it was observed that the totalisers on the pumps were reading in whole numbers; however, sales made in fractions are stored in the memory and are subsequently recorded when they become whole numbers. As a result, the proprietor of the service station was informed of the findings, which were also verified by his representative present. In addition, the GNBS Inspectors were informed by the Technician that a tolerance of one litre (money value/volume) is applicable to the process.

1.11.2 Rice Farmers

Resulting from complaints received from farmers primarily in Region #2 regarding the short weight and inaccurate dockage and moisture contents, Officers of the Region #2 Branch Office conducted surveillance inspections at 12 rice mills on the Essequibo Coast to ensure transparency in the weighing process and compliance with the relevant requirements of the GNBS. Two of the mills visited were using scales without printers and mills had no test mass to verify their scale periodically. As a result, millers were advised to take urgent steps to address these non-conformities, prior to the commencement of the rice crop. 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, resulting in them being cheated.

1.11.3. Weight of prepackaged flour.

As a result of complaints received from consumers regarding the short weight of prepackaged flour offered for sale by the National Milling Company (NAMILCO), checks were conducted by the GNBS on samples at sale outlets to determine the actual weight of the packages, which revealed that they were not the same as stated on the labels, since some of the packages were either below or above the stipulated quantities. As a result, the Company was contacted on the matter and the scales used at the packaging plant were verified and recommendations were made for the defective scales to be repaired or replaced immediately. In addition, follow-up checks were conducted by the Bureau to ensure compliance.

1.11.4 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 and verified in litres. Checks conducted by 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 and cheating of consumers when purchasing petroleum products.

1.12 Quality Management System

The GNBS is moving to implement a Quality Management System to improve the operational efficiency of the Bureau in order to better serve its stakeholders. As a result, procedures and working instructions for the various activities conducted under the Metrology programme were prepared in accordance with the ISO 17020 standard and were finalized by the Conformity Assessment Department. The implementation of the Quality Management System is expected to commence early in 2006.

1.13 Training

1.13.1 Training of Weights and Measures Officers.

Mr. Deonarine Singh, Mr. Miron Rose, Ms. Vashali Lewis, Mr Bharat Persaud and Ms. Abiola Allen, Weights and Measures Officers of Regions # 4, 5, 7, 9 and 10, respectively, were trained by the GNBS on Weights and Measures and Metrication activities to be conducted in the Regions. The training conducted included both theoretical and practical aspects of activities under the Metrology programme.

1.13.2 Training of Estates Representatives.

Training programmes were conducted by Senior Inspectors, Mr. J. Softley and Mr. L. David for representatives and sugar workers of the Blaimont and Enmore Estates during the year, regarding the procedures and tolerances to be applied in the testing of the cane scale at Estates. The training conducted included the practical testing of the cane scales located at the Estates using test masses belonging to the Estates. In addition, an official copy of the procedures to be followed and tolerances to be applied were given to each estate for future references.

1.13.3 Training of GNBS Inspectors.

Internal training was conducted for Inspectors of the Bureau on the requirements of an Inspector, powers of an Inspector under the Weights and Measures Act, the verification of weighbridge scales, the calculation of tolerances, and the calibration of storage tanks. These training sessions were conducted to improve the competency of Inspectors in the execution of their duties.

1.13.4 In house training for staff members.

A half-day training session was conducted by Mr. Lloyd David on activities conducted under the Weights and Measures Programme to increase staff awareness and personal development of staff members.

1.14 External meetings

1.14.1 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 new Commissioner of Police 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 by the Bureau to the Commissioner requesting that arrangement for Police Officers be done through the Officers in-charge of stations to avoid delays.

2.0 STANDARDS COMPLIANCE PROGRAMME

The Standards Compliance Programme is geared to ensure consumer protection and satisfaction through the monitoring of some 25 categories of commodities, local and imported, falling under the purview of the GNBS, in order to ensure compliance with their respective national standards. The investigation of consumer complaints received from consumers relating to the quality of products purchased and services provided are also carried out. It involved the inspection of commodities at sale outlets, and most recently, at ports-of-entry, based on information received from shipping manifests and importers who are referred to the GNBS by Customs.

The Metrology and Standards Compliance Department was also involved in the sampling of rice exported from Guyana to Jamaica at wharves and mills and the coding of same to facilitate testing.

2.1 Monitoring of Imported Commodities

2.1.1 Registration of Importers

A total of 115 importers of commodities monitored by the GNBS under the Standards Compliance Programme were registered for the year. This figure compares with 103 for 2004, 85 for 2003, 94 for 2002 and 213 for 2001. There has been a slight increase in the number of importers who registered with the GNBS this year as compared with the last three years. However, there has been a significant decrease over the last three years when compared with the year 2001, during which Inspectors were stationed at the ports of entry.

The increase in the number of importers registered for 2005 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 for most of the year 2005, resulting in commodities monitored by the GNBS being cleared without examination. This has contributed to the significant increase in the number of consumer complaints relating to sub-standard quality products imported.

2.1.2 New Import Quality Monitoring System

The GNBS encountered a real challenge to have the Customs and Trade Administration (CTA) carrying out agency functions on its behalf, in the process of monitoring the quality of imports. Cabinet's approval was therefore sought to force collaboration between the GNBS and CTA, and a new system was implemented to deal with imports.

The system was effected on **Monday, November 21, 2005** and involves the positioning of an Inspector from the GNBS at the Entries Receiving Desk located at the CTA to screen all commercial entries and stamp those "**HOLD FOR INSPECTION**" relating to commodities monitored by the Bureau.

In addition, all shipping manifests received by CTA are made available to GNBS Inspectors so that the relevant intelligence information required by the GNBS is extracted. In cases where inspections are requested to be conducted at the Ports of Entry to expedite the clearing of goods, arrangements are made to carry out simultaneous inspections by both the GNBS Inspectors and CTA Officers.

Customs entries stamped **HOLD FOR INSPECTION** must be subsequently stamped **RELEASED** or **RELEASED TO WAREHOUSE** and bear the authorized signatures of GNBS Inspectors prior to being released by CTA Officers at the Ports of entry. (Specimen signatures were provided to CTA to facilitate transparency in the entire process.)

Importers are required to schedule examination with the GNBS at least 24 hours prior to the examination. Preference is also given to importers who are desirous of examining their goods at their bonds/ warehouses versus the ports-of-entry to avoid damage or loss.

A press briefing was held by the GNBS to sensitize importers of the newly implemented system. In addition, letters and guidelines on the importation and sale of commodities monitored by the Bureau were issued to importers and 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.

The new system implemented is currently operating satisfactorily despite a few minor problems encountered by the GNBS at the initial stage, which were subsequently addressed by the CTA. As a result, a total of 161 commercial entries relating to commodities monitored by the GNBS were held for inspection and 61 inspections were conducted at the ports-of-entry and importers' warehouses.

2.1.3 Registration of Used Tyre Dealers

Regarding used tyres, 51 dealers were registered with the Bureau for 2005, as compared with 59 for 2004, 56 for 2003, and 50 for 2002. This indicates that the Bureau maintained the continuous monitoring of tyre dealers each year. Inspections of the premises of registered tyre dealers were carried out during the first quarter of the year to ensure that tyres offered for sale complied with the relevant quality requirements, for example, free from cracks on sidewalls, and stored in accordance with the requirements outlined in the Code of Practice for the Storage of Tyres. Permits to sell used tyres were issued to the registered dealers. In situations where minor non-conformities were observed, dealers were given specific time-frame 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 73 inspections conducted throughout the year and a quantity of 225 defective tyres were destroyed, as compared with 377 for 2004, 440 for 2003 and 449 for 2002.

In some cases, dealers were reluctant to allow Inspectors to destroy defective tyres found during examination at sale outlets, since difficulties were experienced with the importers, from whom tyres were purchased, regarding obtaining exchanges or refunds for tyres destroyed by the GNBS. This matter was discussed at a meeting held at the Bureau and importers present had promised to address such exchanges based on the submission of destruction certificates issued by Inspectors of the GNBS during examination. Further, it was decided that if such a situation continues to exist, the GNBS would conduct the examination of tyres at the ports-of-entry for importers who are not willing to cooperate.

2.1.4 Warehouse Inspections

Based on information obtained from shipping manifests and entries referred to the Bureau from CTA, a total of 269 inspections were carried out at importers' bonds/warehouses to ensure commodities monitored by the Bureau comply with their respective National Standards. Products examined during the year 2005 included, new and used tyres, electrical appliances, cigarettes, safety matches, furniture, footwear, textiles, paints, soap powder, electricity and water meters, animal feeds, helmets, gas stoves, furniture, garments, fertilizers and toys and playthings. Commodities examined were generally in compliance with their relevant labeling requirements, except for 438 used tyres and 2 containers of footwear, which were rejected and destroyed due to visual defects. In addition, 2 containers of fertilizers, 468 pieces of garments, 2 containers of paints, 3 containers of footwear, 1 container of toys, 6 containers of soap powder, 169 bags of animal feeds, 450 helmets and 1 container of gas stoves were placed on hold due to inadequate labeling. Also, 2 containers and 66 pieces of electrical appliances were placed on hold due to the absence of certification marks. However, commodities placed on hold were subsequently released, since they were re-labelled and the necessary test certificates were submitted.

2.1.5 Product by Product Campaign

Product-by-product campaign inspections were intensified by the GNBS throughout the year based on numerous consumer complaints received on cell phones, gas filters, water pumps, stand fans, safety matches, cigarettes, zinc sheets, used tyres, toys and playthings, fairy lights and concrete blocks, whereby emphasis was placed on a particular product over a short period of time.

Resulting from examinations at sale outlets, a total of 1,338 inspections were conducted, as compared with 1,326 for 2004, and 2497 for 2003. A quantity of 22 water pumps and 84 packets of cigarettes were seized and removed, 116 pieces of electrical appliances were placed on hold pending submission of test certificates and re-labelling and 225 used tyres were rejected and destroyed since they were found to be defective. There was an increase in the number of inspections conducted this year as compared with the years 2004 and 2003, since more emphasis was placed on the inspection of commodities at sale outlets during the year. In addition, it should be noted that some products focused on during the year 2005 in the product-by-product campaign were different from those in 2004 and 2003, since inspections were carried out mainly on products for which numerous complaints were received.

The discontinuation of ports-of-entry inspections by the Bureau and the lack of cooperation from CTA Officers have affected the effectiveness of the Standards Compliance programme during the year since importers were avoiding the Bureau. However, with the implementation of the new system at CTA in November, 2005, the effectiveness of the Standards Compliance Programme is expected to be improved.

2.1.6 Ports-of-entry Inspections

As a result of ports-of-entry inspections conducted due to the implementation of the new system at the Customs and Trade Administration, a total of 29 inspections were conducted mainly for new and used tyres, electrical appliances, furniture, footwear, textiles, paints, soap powder, garments, fertilizers and toys and playthings. Commodities examined were generally in compliance with their respective National Standards, except for 10 used tyres which were rejected and destroyed and the toys and playthings which were inadequately labeled; the name of the manufacturer and the composition of the materials were missing from the labels. However, the importers were advised accordingly to take corrective actions in order to prevent a re-occurrence of same.

2.1.7 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 13 inspections of Urea, PGP, and NPK fertilizers were conducted at the ports of entry, as compared with 31 for 2004, 28 for 2003, and 27 for 2002. Of the 5 tests conducted on samples taken and checks conducted on the net contents of bags, it was observed that the percentage of active ingredients met and exceeded the stipulated quantities, and the net weights of the bags were accurate.

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 and protection. Fourteen (14) manufacturers (See Appendix 1) had registered with the GNBS for 2005, as compared with 3 manufacturers for 2004 and 9 for 2003. These were mainly manufacturers of garments, furniture, textiles, paints, animal feeds, PVC pipes and concrete blocks. There has been a significant increase in the number of manufacturers registered with the Bureau for the year 2005, as compared with the past three years, which is mainly due to the inclusion of concrete blocks on the list of commodities monitored by the GNBS. However, there was a general 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 Communications Department sensitizing them on the importance of the programme and the need to annually register with the GNBS. As a result, there is need for stronger enforcement activities, such as, the seizing of commodities not in compliance with the respective Guyana National Standards and the prosecution of manufacturers by the Bureau in the New Year.

The examination of commodities manufactured by the registered manufacturers was carried out routinely throughout the year, resulting in visits to 7 garment manufacturers, 20 furniture manufacturers and 21 jewellers' premises. Commodities examined were generally in compliance with their respective national standards. However, in situations where commodities were not in compliance with the respective national standards, the manufacturers were advised accordingly in order to facilitate the compliance of products manufactured in the future. This approach was used to assist manufacturers to produce products of acceptable quality, instead of applying enforcement actions. No complaints were received by the GNBS for 2005 regarding commodities manufactured locally by the registered companies.

2.3 Consumer Complaints Investigation

During the year, 103 consumer complaints were received, as compared with 77 for 2004, 24 for 2003, and 35 for 2002. **Table 5** below shows a comparison of complaints received for the years, 2001 to 2005. There has been a significant increase in the number of complaints received for 2005 as compared to the three previous years. This increase could be attributed to the removal of Inspectors from the ports of entry, which allowed for the importation of defective commodities into the country, without examination by the GNBS.

Table 5
Investigation of Consumer Complaints

Years	Complaints received	Solved	Unsolved	Referred	Pending
2001	57	51	2	-	3
2002	35	23	1	10	1
2003	24	22	2	-	-
2004	77	69	-	8	-
2005	103	90	2	7	4

The nature of complaints received as shown in **Table 6** below, included defective products, inadequate labelling, short weights and measurements and poor quality of services provided. Complaints received related primarily to products such as: electrical appliances, cell phones, car batteries, tyres, concrete blocks, footwear, sand, water pumps, gold jewellery, bicycle, chairs sets, gas stoves, garments, footwear, generators, solar batteries, lumber, safety matches, computer, jig saw, carpet, water dispenser, nails, machine belt, gas bottle top, furniture, drilling machine, and cooking gas. The commodities for which complaints were received in 2004 were similar to those received 2002 and 2003. The complaints received this year were investigated with 90 being resolved, 7 referred to the Ministry of Tourism, Industry and Commerce for relevant investigation, 2 unresolved and 4 pending further investigation by the Bureau.

**Table 6
Consumer Complaints**

Commodities	Number of complaints
Electrical appliances	54
Cell phones	25
Furniture	3
Jewellery	3
Tyres	3
Footwear	3
Gas stoves	3
Safety matches	1
Water meter	1
Carpet	1
Lumber	1
Invitation cards	1
Nails	1
Bicycle	1
Cooking gas	1
Battery	1

Table 6 indicates that about 75% of the complaints received related to electrical appliances and cell phones and the remaining 25% to other commodities. 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 complaint being referred to the Ministry of Tourism, Industry and Commerce. In some situations where there were defective products, inspections were conducted and products not in compliance were seized and removed. As a result, a total of 98 pairs of footwear and 19 water pumps were seized and removed.

Some of the significant complaints received during the year were related mainly to the malfunctioning of electrical appliances during warranty period, used and faulty cell phones which were sold to consumers as new, defective cell phone batteries, poor signals and the net weight of products offered for sale.

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 Communications 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, cell phones, zinc sheets, used tyres, concrete blocks and stand fans 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 newsletters and Standards Information Bulletins.

The Department also participated in the National Quality Week and Guy-Expo events, where activities conducted under the Standards Compliance Programme and their role in Consumer protection were featured and concerns raised by consumers were adequately addressed.

In addition, Inspectors of the GNBS Region #2 Branch Office participated in a job fair hosted by the Education Department of the Region #2 Administration, at the Johanna Cecelia Community High School on 2005-04-14. At the fair, Inspectors of the GNBS outlined the functions of the various departments of the GNBS and the activities conducted in order to achieve its mandate. Persons who attended were interested in the activities of the Bureau, particularly the activities of the Weights and Measures Programme. In addition, flyers on activities conducted by the Bureau were distributed.

2.5 Strengthening of the Standards Compliance Programme

In addition to the 24 categories of commodities monitored by the Bureau in 2004, concrete block was included on the list for 2005. This was due to the dissatisfaction of consumers regarding the poor quality of concrete blocks offered for sale on the local market by manufacturers and dealers.

2.5.1 Customs

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 obtain copies of shipping manifests. These meetings were successful and as a result, the Bureau received copies of the manifests from these agencies. However, the Bureau was successful in implementing a new system to monitor the quality of commodities falling under its purview, based on Cabinet's intervention.

2.5.2 Monitoring of Concrete Blocks

As a result of numerous complaints received by the GNBS regarding the poor quality of concrete blocks offered for sale by manufacturers and dealers on the local market, two meetings were convened with manufacturers of concrete blocks in Region #2 and #4 on 2005-08-10 and 2005-09-06, respectively, to discuss the problems associated with the quality of blocks offered for sale and to discuss ways on how this sector could be streamlined. As a result, it was agreed that manufacturers will register with the GNBS and purchase the necessary standards to be followed in the manufacturing of concrete blocks. A time-frame of four (4) weeks was given to manufacturers to comply with these requirements. Subsequently, a total of 6 manufacturers had registered with the GNBS and 43 inspections were conducted at manufacturers' premises. Most of

the premises visited were not meeting the requirements of the standard, since the blocks were not labeled and the manufacturers were not registered with the GNBS as required. However, samples were taken from manufacturers and sent to be tested in order to determine compliance with the national standard and manufacturers were sensitised on the manufacturing requirements.

In addition, the GNBS commenced work with five (5) of the 5 registered concrete block manufacturers in providing guidance to ensure that concrete blocks manufactured by these manufacturers are in compliance with the national Standard. Work was done individually with each manufacturer in terms of assisting them with the formula to be used in making the blocks and the method of curing. Samples were then taken from each manufacturer and were cured separately at the Works and Service Division of the Ministry of Public Works and tests were subsequently conducted after 28 days to determine compliance. Tests conducted revealed that most of the blocks had failed. As a result, further work would be done with manufacturers to ensure compliance.

A meeting was also held on 2005-09-16 with two representatives from Trinidad Cement Ltd (TCL) of Trinidad to discuss the concerns raised by concrete block manufacturers regarding the quality of TCL cement imported and sold in Guyana. At the meeting, Mr. Benjamin of TCL explained the manufacturing process involved and testing conducted by the company in order to ensure compliance to international standards, and reassures his company's commitment in providing quality cement to the Guyanese consumers.

1.5.3 Monitoring of Zinc Sheets

A meeting was held with manufacturers of zinc sheets on 2005-06-14 at the GNBS to discuss the labelling of the said product, based on numerous complaints received by the GNBS. In addition, visits were conducted by the Director and Chief Inspector on 2005-06-16 at National Hardware, Gafoors and Toolsie Persaud Ltd to witness the corrugation process of zinc sheets manufactured locally and to determine the possibility of labelling same. Based on an examination of the process, it was observed that the labelling of the sheets during the manufacturing was not feasible and it was decided that labelling would have to be done at the sale outlets, based on information provided by the manufacturer at the time of purchase.

Surveillance inspections were conducted at sale outlets to ensure that zinc sheets offered for sale are fully labelled in accordance with the national labelling standard. Resulting from inspections conducted mainly in Regions #2 and 4, a total of 33 premises were visited. Zinc sheets examined were not labelled in accordance with the national standard, as a result the proprietors were advised to label the sheets accordingly.

2.5.4 Meeting with used tyre dealers.

A meeting was convened with used tyre dealers and importers on 2005-04-13 to discuss the Import Quality Monitoring Programme where presentations were made on the requirements for the quality and storage of used tyres. Further, problems encountered by Inspectors of the GNBS at sale outlets were also raised and discussed, and it was agreed that defective tyres found at sale outlets during examination would be destroyed immediately and destruction certificates would be issued by the GNBS to facilitate exchanges/refunds of tyres. Importers and dealers present at the meeting promised their full support and cooperation.

2.5.5 Symposium on Textiles and Clothing

Mr. J Softley, Senior Inspector of the GNBS attended two (2) workshops on textiles and clothing on 2005-04-20 and 2005-06-21, respectively, hosted by the Ministry of Tourism, Industry and commerce on "The Expiration of the Agreement on Textiles and Clothing: Meeting the Competitiveness Challenge" held at the Cheddi Jagan Research Centre. The purpose of the symposium was to assist manufacturers in producing quality products in order to meet the requirements of international markets. At these workshops, Mr. Softley outlined the role of the Bureau in this sector and urged local manufacturers to cooperate with the Bureau in developing the sector.

2.5.6 Meeting held with the Georgetown Chamber of Commerce (GCC)

A meeting was convened with the GCC on 2005-03-03 to discuss concerns raised by members regarding the activities conducted under the Standards Compliance Programme. The concerns highlighted at the meeting were noted and a written response addressing the concerns raised was subsequently sent to the GCC. In addition, a copy of the proposals for the new system implemented at Customs was sent to the GCC for their comments, which were subsequently received and addressed via correspondence.

2.6 TRAINING

2.6.1 Training of Inspectors.

As part of the GNBS in-house training conducted by Senior Officers to facilitate capacity building within the GNBS, Inspectors of the department were trained on the investigation of consumer complaints and the general conduct of Inspectors in interacting with stakeholders, requirements for the labeling of electrical appliances, cell phones and furniture, and the labelling and storage of tyres during the year. The training received was beneficial to Inspectors, since they are better equipped to conduct examinations of these commodities and the investigation of complaints, which would enable them to provide better guidance to manufacturers and importers.

In house training was conducted for the new GNBS Inspectors positioned at the GNBS Branch Office in Region #6 on the various activities executed by the department. This training was conducted in preparation for the commencement of work in Region #6 and to boost the Inspectors knowledge and confidence in order to execute their duties in an efficient and effective manner at the said office.

2.7 Certification of rice

The certification of rice exported to Jamaica continued during the year 2005 as a result of a Memorandum of Understanding signed between the GNBS and the Jamaica Bureau of Standards in 2003, since the Jamaican Authorities were dissatisfied with the quality of rice exported from Guyana to Jamaica, despite being certified by the GRDB.

During the year, Inspectors conducted sampling at wharves and rice mills, and samples collected were coded and forwarded to the Laboratory Services Department for testing. As a result, 1,437 containers (34,919.1 metric tonnes) of white and parboiled rice from 10 exporters were sampled and analyzed prior to exportation to Jamaica as compared with 1,425 containers (34,627.5 metric tonnes) for 2004 and 1124 containers (28,706 metric tonnes) for 2003. **Table 7** below shows a comparison of rice sampled for the years, 2001 to 2005.

Table 7
Rice Sampling

Years	No. of Containers	Metric Tonnes
2001	-	-
2002	-	-
2003	1124	28,706
2004	1425	34,627.5
2005	1437	34,919.1

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.

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.

The sampling of rice at wharves and mills continued to severely affect the other activities of the department due to the increased demand of Inspectors to facilitate sampling activities.

2.8 Monitoring of GNBS Branch Offices

Visits were conducted by the Chief Inspector throughout the year at the GNBS Branch Offices located in Regions #2 and 6 to examine the records, equipment and the Laboratory at the said office. Checks conducted revealed that the records were updated accordingly and the equipment and office were in good condition. However, there was need for the rearranging of a few ledgers to ensure transparency in the records kept at these offices and repairs to be effected on the Region #6 office, which was discussed with the Regional Chairman.

3.0 LABORATORY SERVICES PROGRAMME

The goal of the Laboratory Services Programme is to promote and implement Quality Assurance Systems in testing laboratories and provide Metrology and testing services in Guyana. This is to ensure that customers receive quality laboratory services and products especially gold and rice which are tested by the GNBS. In addition, the Programme also provides Technical assistance to laboratories opting for accreditation.

Accredited laboratories will be assessed for competency to perform the respective tests or calibrations within the scope of accreditation. This will allow test or calibration results issued by these laboratories to be accepted and in effect products tested by these laboratories will be accepted on the national and international markets, thus reducing trade barriers.

The work programme is focused on facilitating consumer awareness and protection, facilitating sustained and enhanced economic growth and increasing revenue generated by the GNBS.

The Metrology Services offered by the Programme provides traceable measurements to industries by providing calibration services to a limited extent in the areas of mass, volume and length. The GNBS has five calibration laboratories to conduct mass, length, temperature, pressure and volume calibrations. The laboratories have equipment to conduct temperature and pressure calibrations; however, this service has not been offered to industries pending training of laboratory technicians which is scheduled for 2006. The metrology services offered will ensure that industries and laboratories use measurements that are accurate in their production and testing activities. This will in effect allow products and services offered by industries and laboratories to be accepted at the national and international markets thus promoting free trade and reducing trade barriers.

There are two testing laboratories in the GNBS, gold and rice testing. These laboratories analyse gold and rice samples submitted by customers to ensure that the products sold are of the required quality for the customer. The rice tested by the GNBS is specifically for the Jamaican market where the percentage broken of rice is analysed with respect to the Caricom Rice Standard before the rice is exported.

The gold testing laboratory tests gold for purity in conformance with the national standard, GYS 50-2: 2003, Specification for gold articles- Part 2: Guidelines for manufacturing, alloying and testing. This testing supports the Product Certification Programme of the GNBS which ensures that certified manufacturers produce and label gold articles with the required purity as specified in the standard to ensure that customers get the required value for their money. In addition, a limited service is extended to the general public for verification of the purity of gold articles purchased from the local market.

In providing Technical assistance to laboratories, the Laboratory Services Department guides laboratories in the 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 internationally. This achievement will reduce barriers in trade and increase economic growth and development.

During the year, the GNBS has not received the expected commitment from laboratories that were identified to be accredited due to constraints affecting those laboratories. To date, no laboratory has met the status for accreditation. However, the GNBS will work more closely with these laboratories in 2006.

The activities of this department are very critical to ensuring that Guyana's locally manufactured products and services conform to recognized standards and there is improvement in the quality of life for Guyanese and products and services exported.

In order to execute the activities of the Department and mandate of the GNBS, the five dedicated personnel assigned to the Department performed their assigned responsibilities with much enthusiasm despite the existing challenges, including training.

It is very critical that staff be proven competent in the activities of the department to promote self confidence and also gain confidence and support from customers. Competency is one of the underlying factors that contribute to accurate and reliable results that the customer requires. In addition, adequate environment, equipment, methodologies and measurement accuracy are crucial for the laboratory environment.

The department is currently developing its quality system to the ISO/IEC 17025 standard for the purpose of accreditation to ensure that customers have confidence in the calibration and testing results. This achievement will also support local industries that are opting for ISO 9001 registration and laboratories opting for ISO/IEC 17025 accreditation.

3.1 Laboratory Certification

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 nonconformances 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.

This programme is mandatory. However, it has not been enforced by the GNBS. The Department will promote the enforcement of this standard in all laboratories in 2006 to ensure that all laboratories operate to the minimum requirements of the national standard thus improving the quality of laboratory services available in Guyana and protect the customers from unreliable results.

3.1.1 Certification of Medical Laboratories

With respect to medical laboratories, for the year 2005, twenty-four (24) opted for certification, thus submitting 23 quality manuals and 61 technical manuals.

Table 8
Submission of medical laboratory manuals

YEAR	MEDICAL LABORATORIES OPTING FOR CERTIFICATION	QUALITY MANUALS SUBMITTED	TECHNICAL MANUALS SUBMITTED
2000	29	7	12
2001	29	25	46
2002	28	11	33
2003	27	12	51
2004	23	17	74
2005	24	23	61

These manuals were reviewed and a number of nonconformances to be addressed by the laboratory were highlighted. The twenty outstanding manuals were expected by December, 2005 for final review. The sixty one technical manuals were reviewed and returned to the laboratory for completion of corrections. These manuals were also expected by December, 2005.

Table 8. shows a comparison of manuals submitted in 2005 with previous years.

Based on the performance of laboratories it was observed that laboratory management and personnel are generally not committed to meeting deadlines for completing the corrections to their manuals by ensuring that the quality system documentation are completed and the laboratories implement the quality system for certification. Due to the absence of legislation for the operation of laboratories in Guyana, laboratory quality is not the focus of laboratory managements. This was also reflected during the period 2000 to 2004.

One initial audit for certification was conducted at Georgetown Medical Centre. This laboratory is in the process of implementing its quality system, after which, another audit will be conducted before certification is granted.

Guyana has over 30 medical laboratories and over 10 non-medical laboratories and less than 10% of these laboratories see it appropriate to ensure that their customers receive accurate and reliable test results.

Table 9. shows the status of completion of manuals by the medical laboratories.

Table 9
Status of laboratories opting for certification to the national standard

NO.	Name of laboratory	Completion of quality manuals (5)	Completion of technical manuals (%)
1	Eureka Medical Laboratory	40	60
2	St. Joseph Mercy Hospital	40	70
3	Central Medical Laboratory	100	100
4	Dr. Balwant Singh Hospital	100	100
5	Sigma Labs	100	100
6	Guyana Responsible Parenthood Association	40	40
7	Medical Arts Centre	80 for level I	80
8	Davis Memorial Hospital	Never submitted	40
9	Woodlands Hospital	60	70
10	Bio- Tec Medical Laboratory	Never submitted	50
11	Images Diagnostic Centre	60	60
12	Multi-Tec Reference Laboratory	Never submitted	Never submitted
13	Linden Hospital Complex	70	60
14	Guyana Defence Force Laboratory	80	70
15	Georgetown Medical Centre	100	100
16	New Amsterdam Hospital	Never submitted	40
17	Suddie Public Hospital	85	60
18	Ogle Diagnostic Centre	Never submitted	80
19	West Demerara Regional Hospital	60	60

The nineteen medical laboratories listed do not represent the number of laboratories in Guyana but the medical laboratories that are in close collaboration with the GNBS.

The table above indicates that five laboratories have never submitted manuals despite regular contact with the laboratory personnel and annual reminders to the laboratory management. The remaining laboratories are not addressing the nonconformances highlighted during the review of the manuals in a timely manner. This slow action has resulted in laboratories not meeting the requirements of the standard to be granted Certification. The fourteen laboratories have submitted manuals at least two times for review but due to incomplete corrections have not resubmitted manuals to date.

It is often indicated that laboratory management were not committed to ensuring that the laboratory personnel had adequate resources to complete the quality manuals and implement the quality system. High staff turn over and unavailability of computer services or a typist to type manuals were also factors which affected a number of laboratories from completing their quality system documents.

As outlined in section 3.1.1 of this report, only legislation will ensure that laboratory management ensure that the quality system at the laboratory is maintained to ensure that accurate and reliable results are issued to customers.

To ensure that laboratories confirm to the minimum requirements and customers receive accurate and reliable test results, it is recommended that the mandatory GYS 170:2003 standard, General requirements for the operation of a laboratory be enforced from January 2006 giving laboratories three months to develop their systems or be placed out of operation. Laboratories were sensitized for more than five years giving them adequate time to put the necessary systems in place. The GNBS should be recognized as the agency or one of the agencies with the authority to ensure that laboratories confirm to the requirements of National Standard, GYS 170: 2003.

The objective of this national programme is to prepare laboratories for accreditation to the international laboratory standard ISO/IEC 17025, General requirements for the competence of testing and calibration laboratories and the ISO 15189 standard, Medical laboratories- Particular requirements for quality and competence. All laboratories will have to be accredited to facilitate the acceptance of goods and laboratory services internationally. Countries in the Region are moving towards accreditation of laboratories and Guyana is no exception.

3.1.2 Certification of Non-medical laboratories

No non-medical laboratories are certified to the National Standard. However, the Guyana Rice Development Board (GRDB), Government Analyst Food and Drug Department, Guyana Power and Light have been working on their quality system documents which should be submitted during the first quarter of 2006. GRDB is currently implementing its quality system in preparation for an initial audit for certification during the first quarter of 2006.

Table 10 shows a comparison of manuals submitted in 2005 with previous years.

Table 10
Submission of non-medical laboratory manuals

Year	Non-medical laboratories opting for certification	Quality manuals submitted	Technical manuals submitted
2000	15	0	0
2001	15	1	1
2002	15	1	2
2003	15	5	10
2004	16	3	1
2005	16	3	0

Only five non-medical laboratories had shown an interest in the Laboratory Certification Programme. Two laboratories were mandated to become certified due to the analyses requested from their customers in 2003. When this was not a concern, the laboratories have failed to maintain certification to the National Standard. The non-medical laboratories have generally not shown an interest in the Certification Programme at the GNBS or have proceeded to implement the requirements for the international standard for the purpose of Accreditation.

Technical assistance in the form of explaining the requirements of the ISO/IEC 17025 standard was provided to Guyana Rice Development Board (GRDB) and Guyana Water Inc (GWI) to facilitate the completion of documentation for the laboratory's quality system and sensitization on the Laboratory Accreditation and Certification systems. Laboratory personnel were sensitized on the benefits of becoming accredited. To date, the GRDB has completed its quality manual and quality system procedures and is currently implementing the quality system at the laboratories. This laboratory is opting for certification before accreditation. The technical procedures are being finalized by the laboratory. The GWI has not submitted any manuals to date to the GNBS for review.

A half day training session was held with the laboratory personnel of GRDB to provide clarity and technical assistance for the implementation of the quality system documentation of the laboratory as it prepares for certification of the laboratory. During this session the benefits of being an accredited laboratory, the implications of accreditation and the importance of management commitment to this process was discussed

Technical assistance was provided to the laboratory personnel at Banks DIH to highlight the gaps of the current laboratory system to the ISO/IEC 17025 standard. This is to facilitate the development of the laboratory's quality system to the ISO/IEC 17025 standard for the purpose of accreditation. This laboratory will benefit from accreditation since it supports the production process of the food and beverage company which exports its products.

Four clinical Sub-Committee meetings (quarterly) were held during the year. At the meetings information was shared among laboratory personnel. A status report of laboratories completing their manuals was presented at the meeting and also commitments to complete first draft manuals were given.

The table above clearly shows that at least eight laboratories had showed a commitment in improving the quality of the laboratory service by becoming Certified. Only two laboratories have maintained that commitment. This is a situation where laboratories do not see it necessary to operate to the requirements of the laboratory standards since the majority of local laboratories are operating without any systems in place. This is another reason for implementing legislation for the operation of laboratories in Guyana.

During 2003, there was an increase in the laboratories certified, however they were unable to maintain their quality systems over the one year period. In addition, the revised National Standard was published and most laboratories were unable to update their systems in 2004 and 2005 to meet the requirements of the revised National Standard due to existing constraints mentioned above.

3.1.3 Certified laboratories maintain the requirements of the National standard.

Two out of four laboratories have updated their quality systems to the GYS 170: 2003 standard and as a result the certification of these laboratories were renewed. The other laboratories that were previously certified to the previous standard have failed to adequately update their quality systems to the current laboratory standard.

Surveillance visits were conducted at Dr. Balwant Singh's Hospital Laboratory and the Central Medical Laboratory-GPHC during the year. These laboratories have consistently maintained the requirements of the quality system.

A renewal audit was conducted at Sigma Labs. However this laboratory is currently implementing the updated quality system. A follow-up visit is scheduled for January 2006 to determine whether there is adequate evidence of implementation of the quality system before the certification of the laboratory is renewed.

The certified laboratories have shown commitment in maintaining their quality systems. However, there is room for continuous improvement of the laboratory operations. These laboratories had consistent staff complement during the year which contributed to the maintenance of the Quality system.

3.2 Metrology Traceability System

3.2.1 Reference Mass Laboratory

The E2 Weight Set (Reference mass) was calibrated. The Weight Set is traceable to international standards of measurements.

The calibrated E2 Weight Set will facilitate the provision of traceable measurements to industries and agencies in Guyana in the areas of volume and mass calibration.

The temperature and humidity of the laboratory environment was improved with the installation of one air conditioning unit in the reference mass laboratory.

During the year seventy five (75) masses and four mass comparators were calibrated for customers.

The mass comparators in this laboratory were serviced; however, the 30.0 kg mass comparator and 5.0 kg mass comparator are still out of order. This has prevented the laboratory from conducting calibrations beyond 200g for customers requesting this service.

3.2.2 Volumetric Reference Laboratory

A water filter and a overhead tank was installed along with a pressure pump to supply the deionizer in the volume laboratory with adequate water to ensure that volumetric calibrations can be conducted using the reference glassware in the laboratory. This system is currently being evaluated by the laboratory.

During the year three (3) volumetric measures and two (2) provers were calibrated for customers.

3.2.3 Temperature Calibration Laboratory

The GNBS received a complement of temperature equipment to conduct temperature calibrations. The equipment included two deep-well baths capable of calibration between - 40 °C to 150 °C and 150 °C to 300 °C respectively. In addition, temperature standards were received by the laboratory to conduct temperature calibrations.

The GNBS has the capacity to calibrate temperatures between - 40°C to 300 °C. The laboratory personnel were not formally trained to operate the temperature baths and conduct temperature calibrations. The company which sold the temperature equipment has offered free training to the GNBS. However, this was not realized due to lack of funding for staff to travel to receive the training. Training to perform these calibrations would be effected in the New Year.

3.2.4 Pressure Calibration Laboratory

An hydraulic comparator was purchased for pressure calibration. This instrument is capable of calibrating pressure equipment used in industries up to 3000 bar. The GNBS has the capacity to conduct pressure calibrations. Pressure calibrations will enable industries to calibrate pressure gauges used within their operations to determine accuracy of pressure used.

3.2.5 Dimensional/Length Calibration Laboratory

The GNBS has the ability to perform length measurements up to 200m. This laboratory is limited in its calibration due to the unavailability of a reference kit with a wide range of length measurements. Efforts would be made to obtain this kit.

Training to perform these calibrations would be effected in the New Year.

During the year one (1) measuring tape, two (2) Vernier calipers, one (1) micrometer, one (1) ruler, one(1) depth gauge and one (1) feeler gauge were calibrated.

3.2.6 Training

Two Officers from the Department attended a one week training programme on Scientific Metrology in Jamaica. During the training programme, the participants were exposed to theoretical and some practical demonstration of calibration exercises. The areas covered were volume, mass and dimensional calibrations.

For volumetric calibrations, participants were exposed to gravimetric and volumetric calibration of provers, pipettes and burettes. The calibration procedure was demonstrated to the participants and they were also exposed to some practice sessions.

For Dimensional calibrations, participants were exposed to calibrating dial gauges, micrometers, calipers and vernier calipers.

For Mass calibrations, participants were exposed to testing of scales and calibration of masses using substitution methods. They visited an industry and observed how balances were tested.

In addition, participants were exposed to calibration of storage tanks, tank strapping and wagon compartments. This calibration process was also observed at a station.

Participants were given the opportunity to observe calibration of a hygrometer and thermometer in the temperature calibration laboratory and electrical calibrations in the Electrical testing laboratory. They witnessed checks conducted on fans, stoves, refrigerators and bulbs before they were approved for sale on the market. The training sessions were very informative and had provided the participants with an insight on how to improve similar operations at the GNBS. The recommendations were outlined in the report prepared by the participants at the end of the training programme. It should be noted that the time allocated for this training was inadequate to provide the participants with enough practice and demonstration of competence in the respective areas.

3.3 **Rice testing**

Two staff members of the Department attended a training programme, on paddy and rice grading and warehouse management which was facilitated by the GRDB. This has improved the performance of staff. During the training programme, participants were exposed to the rice grading techniques and methods of warehouse management.

The large inflow of rice samples at certain times during the year had prevented staff from being involved in the SIM on-line training programme, development of the laboratory's quality system and familiarity with the calibration procedures.

The GRDB is currently implementing its quality system to facilitate certification of the laboratory within the first quarter of 2006. When this laboratory is certified, the rice analyses currently conducted by the department will be transferred to GRDB. This will allow laboratory personnel to focus on the metrology, gold testing, certification and technical assistance activities of the department.

During the year 1387 rice samples were analysed, with 1334 samples falling within the specification. The specification in the Regional and National Standards for broken kernels is 25%. Samples which complied with this specification passed the analysis.

3.4 **Moisture meter calibration**

A moisture meter was purchased to conduct comparative moisture content in paddy. Several moisture tests were done on paddy to validate the official method for the calibration of moisture meters. The objective of these trials was to validate the standard method for the determination of % moisture in paddy to allow the GNBS to conduct calibration of moisture meters.

3.5 **Gold Testing**

Fourteen gold samples were tested for purity during the year. Two samples were below 9.0 karat. Three of the samples tested were for customers verifying the quality of gold jewellery purchased. The remaining samples were to support the Product Certification Scheme of the GNBS. The Product Certification Scheme will be able to provide information on whether the samples tested were within the expected specification.

3.6 **EU Project-Strengthening of Medical Laboratories in the Caribbean**

Two Standard Advisory Committee meetings were held during the year. The strategic plan for implementing the EU project activities at the national level was established.

The Ministry of Health is working with some medical laboratories to implement quality systems for the ISO 15189 standard. The GNBS has not received any progress reports on this activity to date.

The EU project facilitated a training programme as a part of the Human Resource Development component to train Lead and Technical assessors to assess laboratories that will be accredited to the ISO 15189 standard. Eight Lead assessors and Twenty Technical assessors from across the Caribbean and Cariforum countries participated in this training programme. Guyana was represented by one representative from the GNBS who participated in both training sessions. These assessors are being trained to support the Caribbean Laboratory Accreditation Service which will be established to accredit medical laboratories across the Region.

3.7 **Symposium**

The Symposium on **Good Laboratory Practices for Quality Results** was held on Friday November 25, 2005 at the Georgetown Club. The objective of the Symposium was to sensitise personnel from public and private laboratories, manufacturing companies, educational institutions and industries on Good Laboratory Practices. This is intended to increase the number of laboratories certified to the National standard to facilitate the improvement in the quality of laboratory services available in Guyana. Forty five persons attended the Symposium representing public and private laboratories, educational institutions and industries.

The presentations were designed to comprehensively focus on the different areas of good laboratory practices. The areas addressed were quality control in the laboratory, treatment and disposal of laboratory waste, fire safety, personnel safety and sensitization on the importance of implementing standards in laboratories.

The participants were very receptive to the presentations. Based on the comments received from participants there were informed of the importance of using a certified laboratory and also the good laboratory practices that have to be inculcated in the laboratory environment. Two laboratories have expressed an interest to become certified to the National Standard and two laboratories that were previously certified have submitted their manuals for review to the GNBS.

The proceedings of the Symposium was distributed to participants and is available on the GNBS website for future reference.

3.8 Evaluation of the Laboratory Services Department

3.8.1 Performance

Monthly reports of the Department's achievements were highlighted. The constraints affecting the smooth operation of the laboratory were often highlighted at Management and staff meetings. The GNBS has prioritized its activities and has allocated some resources to improve the activities of the department as reflected in the report. Once the GNBS's laboratories are operational, which include suitable laboratory facilities and trained staff, the laboratories will generate income to assist the GNBS in strengthening its activities and making an impact in Guyana.

3.8.2 Staff Training

Training of staff in the Department on the ISO/IEC 17025 standard was completed. The staff were also exposed to reading manuals received from customers. The staff have a basic knowledge of laboratory accreditation and its implementation. Staff still require more practice in policy writing and fully understanding the requirements of the standard. However, the staff have shown enthusiasm in explaining the requirements and writing of policies and procedures. Sessions were normally held three times per week for one hour.

3.8.3 Quality System

The first draft of the quality manual and quality system procedures meeting the requirements of the ISO/IEC 17025 standard was completed. These draft documents are currently being reviewed by the laboratory personnel to facilitate implementation and training of personnel. The gaps to be addressed to ensure that the laboratories meet the level for accreditation will be identified during this process.

4.0 CONFORMITY ASSESSMENT PROGRAMME

The Conformity Assessment programme is that aspect of the GNBS activities which focus on providing support to regulatory agencies, testing laboratories and manufacturers to ensure that an international recognised system for the verification of products and services to standards is implemented. The GNBS is mandated to assist industries to become competitive through improvement in their operations thereby facilitating access to markets and to coordinate the National Conformity Assessment Programme countrywide. In executing these mandates the GNBS has established the following objectives:

- Rationalisation of industry, by co-coordinating the efforts of producers and consumers for the improvement of appliances, processes, raw materials and products.
- To provide an advisory service and undertake training of manufacturers on the Principles of Quality Management, Environmental Management, Standardization and Conformity Assessment.

The Conformity Assessment programme comprises of the following sub-programmes:

- **Technical Assistance:** GNBS provides support to industries in the implementation of management systems meeting the requirements of the ISO 9001:2000, ISO 14001:2004 and the GYS 231
- **Product Certification:** GNBS provides third party certification that certain products conform to national standards
- **Audit Service:** GNBS provides audit services to verify management systems conform to requirements outlined in the ISO 9001, ISO 14001, ISO 17025, GYS 231 and GYS 170.
- **Accreditation:** GNBS provides support to regulatory agencies in the implementation of Inspection Systems conforming to the requirements of ISO 17020:1998 and to agencies that certify products to conform to ISO Guide 65.
- **External Training:** GNBS provides training to Industry in the methods of documenting, implementing and auditing of the various management systems for which it provides technical assistance.
- **Projects:** GNBS works in collaboration with international funding agencies to provide financial support for its work programme activities
- **NCCA:** the GNBS coordinates this interagency Committee for developing the Guyana National Conformity Assessment Infrastructure.

The Conformity Assessment Programme is managed by five staff members viz, the Head of Department, two Technical Officers II and two Technical Officers I. Previously, the Section was called the Management Systems Department with several programmes. The Management Systems Department was renamed Conformity Assessment Department where all the previous programmes were consolidated under the Conformity Assessment Programme to assist the drive of the GNBS to implement the various aspects of the TBT agreement.

4.1 Technical Assistance

Guyana National Bureau of Standards provides **Technical Assistance** to organizations seeking registration, maintenance and improvement to the ISO 9001:2000 and to the ISO 14001:2004 Environmental Management Systems Standard and GYS 231. Companies can easily become compliant, with GNBS support, wherein GNBS:

- guides the organisation in preparing the necessary documentation,
- provides company staff with an overview of the standard,
- trains the internal auditors and conducts an internal audit,
- assists with implementing procedures, and
- assists in the selection of a Registrar,

After registration is achieved, companies can utilize the GNBS services to maintain and improve their Management Systems. The GNBS can be considered as an extension of the company's staff to help the organization perform:

- Internal audits and supplier audits
- Sub-system reviews such as Contract Review, Nonconforming Product, Purchasing, etc.
- ISO Overview and Internal Auditor Training

4.1.1 Quality Management Systems in Companies (ISO 9001:2000 Standard)

4.1.1.1 CPEC/GNBS Project

In keeping with the Government's goal to provide support to the industrial sector in Guyana in order to improve its competitiveness in an open market system, the Guyana National Bureau of Standards (GNBS) approached the Caribbean Programme for Economic Competitiveness (CPEC) in Guyana in April 2002 to explore the possibility of funding for a "competitiveness" pilot project for industry in Guyana.

The project idea presented aimed at achieving two goals, viz.,

- (i) Guiding 10 pilot companies to implement and streamline their quality management systems up to the point where they are declared ISO 9001:2000 compliant by an independent assessor; and
- (ii) Developing and enhancing the GNBS capacity to further support the manufacturing sector in implementing ISO 9001:2000 Quality Management Systems.

CPEC Guyana indicated the project idea was in keeping with the type of projects that are funded by the organisation and stipulated that a concept paper needed to be developed and submitted to the CPEC's Head Office in St. Lucia. The concept paper was approved and the development of the project proposal began in February 2003. The project was approved for funding by the CPEC Guyana selection committee on July 15, 2003 and the Articles of Administrative Agreement was signed on August 25, 2003. The project was officially launched on September 27, 2003. Total funds approved for the project amounted to CDN\$ 215,249 with CIDA/CPEC contributing CDN\$124,067(58%), GNBS contributing CDN\$58,782.00 (27%) in-kind and the remaining 15% (CDN\$32,400.00) being provided by participating companies.

4.1.1.2 Assessment of companies

During the month of February 2005, Mr. Terrence Awai, Consultant from the Trinidad and Tobago Bureau of Standards, conducted preassessment audits of six of the eight companies (GUYSUCO, GNSC, GNIC, Kayman, Sankar, Edward Beharry and Company Ltd and Art Williams Aeronautical School) who were part of the CPEC/GNBS ISO 9001 Project. It should be noted that Guyana Stockfeeds Inc and Denmor Garment Manufacturers did reach the required status for the Pre-assessment audit. The preassessment took place from Monday, February 07, 2005 and culminated on Friday February 25, 2005. Reports were prepared and submitted to the relevant Management Representative of each company.

The GNBS auditors followed up with these six companies to ensure that the nonconformities identified in the reports were being addressed. GNBS guided each company to prepare corrective action plans, visited to ensure implementation, and followed up with regular telephone and email correspondences. The focus of these meetings was to prepare these companies for ISO registration by reviewing and strengthening each company's monitoring and measurement processes for their Quality Management Systems. Many of the challenges faced were overcome by the dedication of the staff of the GNBS and from the companies to make this a successful project. With the availability of finances, the project made the technical assistance programme of the GNBS successful.

4.1.1.3 Project benefits

To date, Edward B. Beharry and Company Ltd and Guysuco have completed their Registration Audit and are certified to the ISO 9001:2000. This is a significant achievement not only for the Companies but also for the GNBS. Firstly, from a project management standpoint, the success of these companies means that the project design and management were well executed which left a model for future projects. Secondly, the project helped six companies to become compliant to ISO 9001:2000 and the experience gained on the project helped the GNBS to improve its capability in providing guidance in the future. Edward Beharry and Company Ltd. held a special ceremony to mark this achievement at the Le Meridian Pegasus on September 12, 2005. The ceremony was addressed by the Chairman of the Board, Mr. Chico Beharry, Dr. Chatterpaul Ramcharran, and His Excellency President Bharrat Jagdeo. Dr Ramcharran, in his address, outlined the role of the GNBS and the need for more companies to get onboard with the ISO 9001:2000 process.

The quality management systems of four remaining companies, namely GNIC, Kayman Sankar, Art Williams Aeronautical School and GNSC are well implemented, particularly with regard to the control of production, monitoring and measurement of product and processes, and resource management. The companies have established corrective action plans to address the nonconformities identified in their audit reports. These companies are well placed to comply with all of the requirements of the standard and will be ready for the final registration in the New Year. As a major requirement for certification, these companies are faced with the issue of ensuring that their measuring and test equipment are traceable to National and International Standards. There is also the factor of the cost for registration.

The GNBS is currently working on a programme to assist other companies who have made request for the GNBS assistance. These companies include: Banks DIH, DIDCO, BACIF and GPL.

4.1.2 Environmental Management Systems in Companies (ISO 14001:2004 Standard)

The GNBS received two requests from companies during the year for assistance in ISO 14001:2004, i.e., from Banks DIH Ltd. and Demerara Power Company Limited. In the case of Banks, a Gap Analysis Audit was conducted, which revealed that Banks DIH has a good foundation for developing an Environmental Management System since there is an existing Quality Management System. With regards to Demerara Power Company, a document review audit is currently being conducted. Though environmental concerns are major issues in the global trade arena, not many companies in Guyana have been vying for Environmental Management Systems. Notwithstanding, this is expected to become of greater importance in the near future. When compared to last year, this sub programme has improved, since last year there was no serious request. In the Banks DIH case, this

is now a requirement from two of their franchise holders, Diageo and Coca Cola. ISO 14001 is critical for any company wishing to improve on the impacts of its production activities on the environment.

4.1.3 Management Systems in Micro and Small Enterprises (MSE)

4.1.3.1 Empretec Project

EMPRETEC is the integrated capacity-building programme of the United Nations (UNCTAD) which aims at promoting the creation of sustainable MSEs. Support structures to help promising entrepreneurs build innovative and internationally competitive MSEs.

The acronym EMPRETEC is derived from *empresas tecnologicas*, a Spanish phrase which translates as technology-based enterprises. Since EMPRETEC's inception in 1988, the programme has become operational in more than twenty-five (25) countries, assisting close to 60,000 entrepreneurs through local market driven Business Support Centres. Project implementation, which includes five stages, is tailored to the reality of each country and ranges from the creation of the local infrastructure (establishment of the office) to the execution of the training programmes respectively.

The services provided include entrepreneurial training, the core focus EMPRETEC Guyana, and post training support in the form of the following business development services.

- Business Diagnosis and Health Checks
- Accounting and Bookkeeping Services
- Technical assistance in the preparation of Business Plans
- Business Counselling
- Assistance in sourcing credit
- Assistance in identifying sub-contracting opportunities between MSEs and large local companies and,
- Promoting Linkages between local MSEs and foreign companies
- Export development

4.1.3.2 GNBS and Empretec Collaboration

The GNBS and Empretec Guyana formally met and discussed the possibility of the GNBS working with an Empretec Network to provide guidance in the implementation of the GYS 231 standard. This standard was formulated by the Guyana National Bureau of Standards in 2003, after the draft was finalised by the Technical Committee-Management Systems and approved by the National Standards Council.

This standard was developed to assist micro and small enterprises in the implementation of an environmental management system, quality management system and an occupational health and safety management system.

It is hoped that by conforming to the requirements of this standard, micro and small enterprises would be more efficient and competitive in international markets.

Two planning meetings were held with Empretec for collaboration to promote good management practice with MSE's during 2005. A detailed programme schedule was developed at these meetings which were held on February 11 and 17, 2005, respectively. The Programme outlined the activities that were expected to be covered by the participant in order to become compliant

The GNBS held two workshops during the month of March for the implementation of the guidelines for good management practice of MSE. A series of meetings were also held with the small business owners during the months April, May and June. The focus of these meetings was the preparation of the Business Operation Manual which, in addressing the requirements of the standards, will also form a basis for guiding the daily production or service processes. The participants were also guided in conducting customer surveys, environmental aspects evaluations as well as occupational health and safety risk analysis to guide the improvement of the business product/service in the marketplace.

This is a collaborative project between the GNBS and Empretec. The workshops were held on March 02 & 23, 2005. Seventeen small business owners attended these workshops and have committed themselves to completing the six months programme for implementation of these guidelines. The workshop on March 02 focused on the need for establishing quality and its importance in an open market system. The second focused on the interpretation and application of these guidelines. This will be an ongoing process for the next year until the businesses have achieved full implementation.

The following enterprises ably completed a significant amount of their business operations manuals at the end of the year:

- (1) Paper Trail
- (2) Rainforest Pottery
- (3) Yonz Kids Wear
- (4) Vidya's Copy Shop
- (5) Irene Creative Craft
- (6) Despat Training & Catering Centre
- (7) Summerson Furniture Manufacture
- (8) Pebbles Kiddies College
- (9) Kerrington Inc.
- (10) Beauty Nook

One major constraint was the scheduled time for facilitating this programme which did not allow for full attendance of some of the business owners at all sessions since many times this required them closing their operations to be present. The small businesses are expected to be certified to these guidelines at the end of the programme provided that there is compliance.

The GNBS is currently in discussions with IPED to provide support to micro and small enterprises that form part of IPED Programme similar to Empretec.

4.2 PRODUCT CERTIFICATION (National Standards Mark)

This is a scheme through which manufacturers are certified to mark their products with the National Standards Mark, after their manufacturing processes and products have been assessed as conforming to the relevant Guyana National Standards on a continuous basis.

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

- i. Relevant Guyana Standards.
- ii. Available testing facilities.
- iii. Adequate quality control systems in manufacturing processes.

There are three procedures under the G.N.B.S. Product Certification Scheme:

Initial Certification: This procedure is suitable for clients applying for initial certification for the use of the Standards Mark, and comprises application, preliminary visit, audit and approval. At the application stage, the client completes an application form and submits it to the Bureau. If the application is successful, a preliminary visit is conducted to determine the client's capabilities of meeting the requirements of the scheme. The client is notified about deficiencies and upon correction, a final audit is conducted. The audit report is submitted to the Advisory Committee on Certification, which then passes on their decision to National Standards Council (NSC) for final approval.

Renewal of Certification: An expiry date is affixed to all certificates granted depending on the safety and health hazards associated with the product, hence there is the need for the renewal of certification for the use of the Standards Mark. This procedure is similar to the procedure for Initial Certification with the omission of the preliminary visit stage.

Surveillance Audit: After granting the certificates, surveillance audits are conducted on a quarterly basis to ensure ongoing conformity. In this procedure, the audit is planned, conducted and reported on. Follow-up visits are done if major non-conformities are highlighted to check on corrective actions.

The policy of the Product Certification Programme of the Guyana National Bureau of Standards, is to promote standardisation and consumer awareness of local products by giving assurance to consumers, through the award of the Standards Mark to products that meet the requirements of Guyana National Standards and applicable certification schemes.

This policy is to be achieved through the following objectives: -

- granting permission through the issue of a certificate to manufacturers, to mark their products with GNBS's Standards Mark, once having satisfied the requirements of the relevant National Standard and certification scheme;
- conducting regular surveillance audits to ensure that certified manufacturers continue to conform to the requirements of the relevant National Standard and certification scheme.
- ensuring that personnel at GNBS that are involved in certification activities have the necessary training and competence.
- promoting the Standards Mark with consumers, and encouraging local manufacturers to participate in product certification.

The goal of the Product Certification Programme is to promote, implement and monitor product certification systems in industries in order to provide consumers with the assurance that locally-manufactured products conform to the requirements specified in Guyana Standards.

4.2.1 Maintenance of Standards mark permits

The table below summarizes the number of surveillance and renewal audits for the eight (8) clients currently on the Product Certification Scheme.

Table 11
Audits of certified companies

Name of Client	Product	No. of Surveillance audits conducted	No. of Renewal Audits conducted
Kings Jewellery World	Gold articles	1	1
Steve's Jewellery	Gold articles	1	1
Seeram's Jewellery	Gold articles	1	1
De Abreu's Collections	Gold articles	2	1
Alims Jewellery	Gold articles	1	0
Johnny's Jewellery	Gold articles	1	1
Guyana Thermoplastics Limited (GTL)	PVC Pipes	2	2
Plastic Products Limited (PPL)	PVC Pipes	0	2

For the year 2004, 95% of the audits scheduled were completed.

Based on the twenty (20) audits that were scheduled for 2005, 90% were completed. An average of 2 audits were conducted per client. All certificates were renewed after successful renewal audits. During the audits that were done, minor nonconformances and opportunities for improvement were highlighted to the clients. Surveillance had been minimal for clients with no nonconformances.

Overall, there had been a significant improvement in the testing area for clients, particularly for GTL and PPL. As such, efforts were made to address safety concerns and upgrade testing equipment.

For the year, products certified by the GNBS have penetrated the market place and no legitimate complaint had been received regarding these products.

Clients have been addressing minor nonconformities and opportunities for improvement; however, they were not addressed in a timely manner.

For independent testing, samples from the jewellers were taken from the showcases. On the other hand, for PVC pipes, testing was done at the manufacturer's premises since there is no independent testing facility for PVC pipes in Guyana. Thus, open market sampling was adequate for gold articles, but rather insufficient for PVC pipes.

4.2.2 Working with new clients

In its effort to attract more clients on the GNBS Product Certification Scheme, the Bureau worked with the clients outlined in the table below. The status achieved is also given for each client.

Table 12
New clients on Product Certification Scheme

No.	Name of Client	Product	Status achieved	Remarks
1	Laurence Lowe's Jewellery	Gold articles	Preliminary audit conducted	Recommendations made. Client to address same before advancement to the next stage.
2	Correria's Jewellery	Gold articles	Preliminary audit conducted	Recommendations made. Client to address same before advancement to the next stage.
3	Gopaul's Jewellery	Gold articles	Preliminary audit conducted	Recommendations made. Client to address same before advancement to the next stage.
4	Gafson's Industries	Steel nails	2 Certification audits conducted	Client to adjust manufacturing process to meet the requirements of GYS 214.
5	Gafson's Industries	PVC Insulated Cables	Plant tour conducted. Application form uplifted	Preliminary audit will be conducted when standard for PVC cables is completed. STI is completed
6	Banks DIH Limited.	Rum, Bottled water, Carbonated beverages, Beer	Application forms uplifted. Procedures explained.	
7	Sunil Persaud's Jewellery	Gold articles	Application form uplifted	
8	Tandy's Manufacturing	Jams & Jellies	Application form uplifted. Procedures explained to client.	
9	Fibre Tech Creations	Fibre Tech products	Application form uplifted.	

- (i) It can be recognized from the table above that preliminary audits have been conducted at Laurence Lowe's, Correria's and Gopaul's Jewelleries. This was done since the previous year; however, the clients have not addressed the recommendations of the audit for advancement to the next stage in the certification process. Despite this, several follow-up visits were made to the client to assist in addressing the recommendations of the audit. Follow-up was done on a monthly basis via telephone or individual meetings with the client at the GNBS and at the client's premises. Before advancement to the next stage in the certification process, the clients have to address the recommendations of the preliminary audit. As such, the record forms recommended by the Bureau have to be implemented. The assay method of testing also has to be adopted.
- (ii) In the case of Gafsons Industries for the certification of steel nails, the sizes of nails manufactured did not match the sizes specified in the standard GYS 214: Specification for steel nails. After a meeting, the client agreed to manufacture sizes of nails that are listed in the Guyana Standard. The audit proved that the client is not conducting measurements on the nails manufactured as per an acceptable quality level of 2.5 % in the standard GYS 214.
- (iii) With respect to the certification of PVC Insulated cables, an STI was prepared and sent to the client for approval. A national standard is currently being developed and as such, certification would take its course upon completion. Minor modifications have to be made to the STI for suitability to the client's operations.
- (iv) The same applies to the certification of Fibre Tech products.
- (v) Application forms were uplifted by Banks DIH for the certification of rum, beers and carbonated beverages. A plant tour of the manufacturer of each product was also conducted. Procedures for certification were explained to the client. From the tour of Banks DIH, it can be concluded that the infrastructure is in place for the certification of these products. All critical control points in the manufacturing processes have been identified and records are being kept accordingly. When the application forms are received, STIs would be prepared for the production processes of the different products manufactured and certification would take its course.

Generally, it can be observed that some clients have shown the interest by applying for certification; however, the recommendations of the visits have not been addressed in a timely manner. On the other hand, requests were received from Gafsons for the certification of zinc sheets, wire mesh, chain links and BRC fabric; however, standards have to be developed before the certification process can take its course.

For the promotion of the jewellery certification programme to the jeweler in the Essequibo region, a jewellery workshop was conducted in Bartica. At that workshop, 7 jewellers participated who promised to join the certification programme when they have the required infrastructure i.e. testing facilities and the manufacturer's identification mark.

It can be concluded that when the relevant national standards are available, more clients and new products would definitely be on the GNBS Product Certification Scheme providing that the necessary infrastructure is in place to facilitate certification. This includes compatibility with the relevant national standards and the availability of testing facilities. For the above clients, if they continue to pursue the certification process by showing commitment, there would definitely be more clients and new products on the certification scheme.

4.2.1 Accreditation of the GNBS Product Certification Scheme

The GNBS has taken the initiative to accredit the GNBS Product Certification Scheme. Having the scheme accredited to the international standard **ISO/IEC Guide 65: General requirements for bodies operating product certification systems**, clients would have more confidence in the GNBS operating as a third party certification body. Certified products would also be internationally recognized.

A certification manual was prepared for the GNBS Product Certification Scheme. In the contents of this manual all requirements of the International Standard ISO/IEC 65 were considered.

In the route to accreditation of the GNBS Product Certification Scheme, all documentation (certification manual and the relevant procedures) have been completed and as such, 50% of all activities planned have been achieved.

In coping with international norms and as specified in ISO/IEC Guide 65, few adjustments have to be made to enhance impartiality, confidentiality and transparency in the certification process.

When the process is completed, locally certified products would have easy access to the international markets.

4.3 AUDIT SERVICE

The Guyana National Bureau of Standards (GNBS) has introduced a new programme in its range of activities which is geared towards providing audit services to organizations, companies and laboratories desirous of having an independent assessment of their operations, to determine conformance to objectives and criteria established by the client.

4.3.1 Audit Training

4.3.1.1 Guyana Tourism Authority and Ministry of Labour

Discussions were held with representatives from the Guyana Tourism Authority and the Ministry of Labour on possible collaboration in providing audit services and training in the areas of Tourism and Hospitality and Occupational Health and Safety. Of importance to note, the GNBS auditors were trained in quality management auditing. The purpose of the discussions was to seek training for GNBS auditors in other areas.

4.3.1.2 Project Proposal

A proposal for funding of training for technical personnel on Hazard Analysis and Critical Control Point (HACCP) was prepared and submitted to the CARANA Project. The purpose of the training is to build auditors capacity which will be beneficial in auditing of food and food related industries.

4.3.2 Audit Service

4.3.2.1 Launching Audit Service

The Audit Service Programme was launched on February 11, 2005. In attendance were several companies and members of the National Standards Council and the media covered the event. A fact sheet outlining the Audit Service Procedure was prepared and distributed to all present at the launching of the programme and an additional fifty were attached to letters and sent to organisations.

4.3.2.1 Audit Service Procedure

A draft procedure on Audit Service and a Guidance Manual for the Audit Service Programme were completed. The purpose of the procedure and manual is to allow for consistency of all activities under the programme.

4.3.2.2 Audit Of Guyana Gold Board

The Guyana Gold Board requested the Bureau's Audit Service. However, there was no documentation on the processes involved, and all relevant information was gathered and compiled.

The information documented was reviewed and approved by the Guyana Gold Board personnel. A technical expert was solicited and the proposed costing was sent to the Guyana Gold Board. On reviewing the cost, the Board felt that it was too high therefore, the audit was not conducted.

4.3.2.3 Audit of Guyana Sugar Corporation Incorporated

The Guyana Sugar Corporation Incorporated, Blairmont Central factory requested Audit Service. One meeting was held with the relevant personnel to determine the scope and criteria for the audit. The Audit Plan was developed, checklist prepared, documents were reviewed and on site audits were conducted on May, 31 2005.

The Audit Report was sent to the client highlighting nonconformances and opportunities for improvement.

4.3.2.4 Audit of Guyana Thermoplastics Limited

The Guyana Thermoplastics Limited requested audit service. On site audits were conducted on three batches of PVC Pipes to the requirements of the standard "Specification for Poly (Vinyl Chloride) Pressure rated Pipes (SDR) Series". All the batches sampled were in conformance to the standard.

4.3.2.5 Audit of BACIF

Brass Aluminum and Cast Iron Foundry (BACIF) requested a Gap Analysis Audit to the requirements of the ISO 9001 : 2000 standard. The audit was conducted on August 02, 2005 on site and covered the entire operation of BACIF. A report on the findings, recommendations and an implementation plan was submitted to the client. On reviewing the report and plan, BACIF decided to work with the Technical Assistance Programme to execute the implementation plan.

4.3.2.6 Audit of GPL

The Guyana Power and Light Incorporated requested an audit of its Customer Services Department. The audit was conducted on August 31, 2005 and a report on the findings and recommendations was submitted to the audit client.

4.3.2.7 Audit of DIDCO

DIDCO Trading Company Limited requested a Gap Analysis Audit to the requirements of the ISO 9001 : 2000 standard. The audit was conducted on September 13,14 &15,2005 and covered the entire poultry operation, including the hatchery, feedmill, farm, processing plant and the administrative sections. A report on the findings, recommendations and an implementation plan was submitted to the audit client. The implementation plan will be executed under the Technical Assistance Programme.

4.3.2.8 Audit of Banks DIH Limited

Banks DIH Limited requested a Gap Analysis Audit to the requirements of the ISO 9001: 2000 and ISO 14001: 2004 standards. The audit to the requirements of ISO 9001: 2000 standard covered the TRISCO and Rum Plants while the ISO 14001 : 2004 standard covered the entire operation of Banks DIH Limited which was conducted on December 06 and 07, 2005.

Audit requests were addressed as received.

4.3.3 Other Audit Services

Preliminary audit, renewal audits and surveillance audits were conducted for medical laboratories under the Laboratory Certification Programme. In addition, preliminary audits, renewal audits and surveillance audits were conducted for the Product Certification Programme. (Section 4.2.1).

4.4 ACCREDITATION

Conformity assessment activities such as Inspection and Certification form a vital link between standards (which define necessary characteristics or requirements for products and services) and the products and services themselves. Together standards and conformity assessment activities impact on almost every aspect of life in Guyana.

The purpose of accreditation is to use standards as a basis of evaluation to ensure quality products or services, to encourage institutions to improve quality and services and to ensure the accountability of accredited institution to provide public confidence.

The drive for economic development in Guyana is closely associated with its ability to export locally-manufactured products and effectively monitor the quality of imports. For the last decade Guyana has been involved in negotiating many multilateral and bilateral trade agreements to facilitate its locally manufactured products and services in the international trade arena. However, these local products and services will only be accepted if we can provide assurance to the marketplace that they have met requirements stipulated in standards/regulations and/or are being produced under recognised and acceptable management systems of the marketplace. In relation to imports this will require a vibrant monitoring regime with the required legal support to ensure protection of the Guyanese people. The GNBS has established two cluster groups made up of inspection and certification agencies for the purpose of developing management systems of these agencies to meet international acceptable standards for inspection and certification. This work is part of the national drive to develop the National Conformity Assessment infrastructure.

4.4.1 Accreditation of Inspection Bodies

In the first half of 2005, a draft manual template addressing the requirements of the ISO 17020 standard – General criteria for operations of various bodies performing inspection – was completed and circulated to inspection bodies for them to review and adapt to their operations/processes. Two meetings were held with the participating organisations to discuss the progress of the development of the inspection manual.

The Guyana National Bureau of Standards, from the periods August 2005 to December 13, 2005, recommenced the provision of technical assistance to twelve (12) Inspection Agencies in Guyana. This process of accreditation of Inspection agencies to this standard was further strengthened with seven (7) of the participating agencies submitting letters of commitment concretizing their support and commitment to the process. The agencies also submitted letters identifying their management representatives. To date, seven (7) of the twelve (12) agencies have submitted documentation based on the elements of the standard. This was reviewed by GNBS and returned to the respective agencies.

As with all processes, an implementation plan for the accreditation of the Inspection Bodies was prepared and distributed to all the agencies involved. This plan included the schedule for (training) manual preparation, GAP analysis, document review and implementation and compliance audit. To facilitate a greater awareness of this standard, a series of presentations were done, along with a one-on-one contact.

GNBS's drive to get the accreditation of Guyana's Inspection bodies has been faced with challenges. Some agencies have been vividly voicing lack of personnel (understaffing), lack of financial resources and equipment. Thus, this process is moving very slowly and not at the anticipated pace.

In addition, failure by some agencies to commence documentation as it relates to their quality manual is a cause for concern. Non-attendance of some participants is also another challenge.

Despite these set backs, some organisations have been on target with the documentation of their quality manuals.

With the CSME implementation on stream, Guyana's inspection agencies will have to be assiduously proactive and get their operations streamlined to effectively and efficiently be competent in their inspection operations.

Inspection Agencies participating in the process are as follows:

1. Guyana National Bureau of Standards
2. Guyana Tourism Authority

3. Wild Life Unit
4. Plant Health Unit
5. Animal Health Unit
6. Veterinary Public Health Unit
7. Guyana Rice Development Board
8. Guyana Forestry Commission
9. Guyana Marketing Corporation
10. Environmental Health Unit
11. Food and Drug Department.
12. Environmental Protection Agency

4.4.2 Accreditation of organisation operating Product Certification Systems

The Guyana National Bureau of Standards as of August 2005, embarked on a drive to provide technical assistance to bodies operating product certification systems in Guyana, to become accredited to the ISO/IEC Guide 65: General requirements for bodies operating product certification systems. As such, six organizations have been identified for technical assistance, i.e., Guyana Forestry Commission, Guyana Tourism Authority, Guyana Rice Development Board, Veterinary Public Health (Ministry of Health), Plant Health and Animal Health Units – Ministry of Fisheries, Crops and Livestock.

Subsequently, an implementation plan was developed and addressed as its first element, preparation of manuals (documentation). Other elements of the plan include Gap analysis, document review and Implementation and compliance audit. Each organization is required to develop its manuals addressing all the requirements in the Guide. This process is estimated to last for three and a half months (3 ½) during which, participants will be educated on the Guide and provided with examples on how each clause should be written. To date, all presentation sessions have been completed and documents are being reviewed for conformance to the Guidelines.

The response to the Guide 65 process by the six (6) organizations is somewhat slow for some and unresponsive to others. This is evident by the irregular attendance and the non- submission of manuals for review. To date, only three(3) organizations have submitted parts of their manuals for review, including Guyana Rice Development Board, Guyana Forestry Commission and Plant Health Unit.

These organizations, besides participating in the Guide 65 process, are also a part of the ISO 17020: - General requirements for bodies operating inspection systems - with the exception of Guyana Rice Development Board, which is apart of an additional process, ISO 17025: General requirements for the competence of testing and calibration of laboratories. As such, the majority of these organizations have one person involved in the documentation for each standard, compounded with the regular duties the person has to perform in his/her respective organizations. As a result, the person is tremendously burdened with the volume of work and the

quality of the manuals is evidently poor. This undoubtedly would lead to the accreditation of these organizations being delayed.

In light of the aforementioned issues, it has been requested and will be re-emphasized that there should be a competent person and an alternate to represent each organization on each accreditation project.

GNBS will continue to move forward with the process of accreditation for the certifying bodies.

4.5 External Training

A training curriculum for internal quality audits was prepared and the GNBS will now be in a position to offer this programme to companies wishing to develop their internal quality auditing capacity. Internal Quality Audit provides a basis for any company to evaluate from an internal prospective whether activities and procedures are being followed and how improvements can be made.

The GNBS conducted this programme with Guyana Stockfeeds Ltd. from April 08 to May 13, 2005 (training on a half-day basis to facilitate continuity of work at the company).

This training programme comprises of eight modules. Participants benefit since they are assessed after each module and are required to write a final examination.

4.6 Projects

4.6.1 GTIS Project

The USAID Guyana Trade and Investment Support (GTIS) Project, a joint Government of Guyana-US Government project, aimed to maximize Guyana's benefits from international trade agreements and position target firms to exploit market opportunities. The CARANA approach is based on the premise that targeted activities focusing on Guyana's industry-specific critical success factors can create an environment for sustainable growth.

A special meeting was held with officials of the USAID sponsored project – Guyana Trade & Investment Support on October 18, 2005 to discuss the way forward on GNBS project proposal. As a matter of priority, five sub-deliverables were approved as follows:-

- (1) Funding (66%) for companies which are at a stage of readiness for ISO 9001 certification.

- (2) Funding for the review of GNBS Standards Act and Weights and Measures Act and for the development of regulations under the said Acts
- (3) National Training of Trainers courses in Conformity Assessment Processes such as testing, calibration, inspection, quality, certification and environmental management.
- (4) Attachment of a Legal and Scientific Metrologist to review and train GNBS personnel.
- (5) Support for GNBS Gold Laboratory.

As a follow up to the meeting held with officials of the GTIS, and as requested, the GNBS pursued the relevant bio data for Consultants to provide assistance in the areas of the Metrology Legislation and for a Metrologist to be attached to the GNBS. To date, information has been acquired for Consultants from Jamaica Bureau of Standards, Trinidad and Tobago Bureau of Standards and the National Institute for Standards and Technology (NIST) from the USA. These activities are expected to commence in January 2006. The four companies remaining on the CPEC/ GNBS project on ISO 9001:2000 are also in the process of finalising preparations for registration in January 2006. GTIS proposed to sponsor 66% of the certification cost.

4.6.2 CROSQ/IDB Regional SME Project

The GNBS, on December 16, 2005 signed on the CROSQ Project for SME. The aim of the project is to establish and implement regional technical standards, in order to increase trade in goods and services and promote regional and hemispheric and global integration. The project will target Small and Medium Size Enterprises in CARICOM. The project will be funded by the IDB and will be executed in four countries, namely, Guyana, Barbados, Jamaica and Trinidad & Tobago.

The **goal** of the project is to strengthen the competitiveness of recipient SMEs by getting them involved in industry, country and region-wide standardisation efforts to facilitate trade in goods and services and promote regional, hemispheric and global integration. Its **purpose** is to build on the existing infrastructure of regional standardisation and develop a model for technical standard setting, demonstrating to government and the private sector its strategic importance for trade facilitation and, hence, the need to ensure its sustainability through a steady demand for standards development with an increasingly large share of co-financing furnished by stakeholders.

4.6.3 UNDP Environmental Management Systems project

The GNBS submitted a project proposal through the Ministry of Foreign Affairs by way of the Permanent Secretary of the Ministry of Tourism Industry and Commerce to the UNDP for a project on Environmental Management Systems. The Proposal was reviewed by the Project Committee and the GNBS was asked to revise certain aspects of the project document and to prepare a budget for the project. The GNBS was also asked to collaborate with the EPA on this initiative. The information was completed in collaboration with the EPA and resubmitted on December 09, 2005 for the Steering Committee's meeting to be held on December 16, 2005. This is a key project that will greatly enhance the GNBS and private Consultant to provide guidance to industries in implementing Environmental Management Systems and fostering greater awareness for prevention of pollution.

4.7 National Conformity Assessment Committee

Three (3) meetings of the National Committee on Conformity Assessment (NCCA) were held where members discussed issues related to this Committee realizing its goal and the proposed way forward for the 2005. At these meetings, members were briefed on the discussions that were held with the Ministries of Foreign trade and International Cooperation (MFTIC), Agriculture, and Tourism, Industry and Commerce (MTIC). Members were also updated on the developments that are taking place within the Caricom Single Market and Economy (CSME) and in Guyana as it relates to Conformity Assessment and Trade.

A draft report outlining the activities of the NCCA in the year 2004 was completed and submitted to the members to be reviewed and for their comments. This report is to be finalized and submitted to the Policy Makers for further discussion.

A concept paper on the establishment of an internationally recognised national conformity system for Guyana was drafted and submitted to the Director. This paper will be forwarded to the Guyana Trade and Investment Support (GTIS) project.

Three meetings of the committee were completed for 2005. However the participation of the institutions that are apart of this Committee needs to be improved for it to be more effective.

The attendances at the meetings were poor, where the representatives were primarily from the Government Sector. The private sector needs to be more involved in this process.

There is the need for more commitment and involvement of some of the more important government agencies operating in the major exporting sectors of Guyana because of their importance in providing assurance on the quality of products being produced in these sectors for export.

Because of the critical nature of these activities and the impact they can have on Guyana being prepared for open market access and free trade, it is suggested that these activities be recognized as having national effort be put in place to ensure that priority is attached to addressing issues relating to conformity assessment.

5.0 STANDARDISATION

The Standardisation Department of the Guyana National Bureau of Standards (GNBS) is responsible for planning, organising and directing the development of national standards. Standards are developed in a wide variety of fields by Technical Committees (APPENDIX II) comprised of experts in each field. Justification must be provided for any standards development project.

The standards development process (APPENDIX III) is coordinated by four (4) Technical Officers of the Standardisation Department. The department works closely with various Technical Committees and other interested parties to develop and execute the standards development work programme, which includes, inter alia:

- (a) research activities and foresight planning for identification of greater priorities for standardization;
- (b) formulation of draft standards and identification of suitable regional and international standards for adoption as national standards;
- (c) review and maintenance of national standards;
- (d) periodic consultations with producers, service providers, government agencies, the private sector, consumer representatives, special interest groups and the general public to promote the concept and importance of standardization in national development; and
- (e) participation in regional and international standardization.

The standards development work programme of the GNBS focuses on the development, adoption and application of standards that will enhance product or service competitiveness, and ultimately the economic development of Guyana. These standards may be developed from scratch but such an approach is often costly and time consuming. Also, there is always the very real possibility that the lengthy development process will culminate in no more than a re-invention of the wheel.

In view of this, the standardisation department encourages Technical Committees to adopt regional or international standards that will bring greater benefits to Guyana on a wider scale. Technical Committees operate on a consensus principle and the public is given the opportunity to examine and comment on all draft standards before they are adopted as national standards.

The Standardisation Department houses Guyana's WTO Enquiry Point which answers all reasonable enquiries from other Members and interested parties, as well as provide, inter alia, relevant documents regarding:

- (a) Technical Regulations adopted or proposed within its territory;
- (b) Standards adopted or proposed within its territory;
- (c) Conformity assessment procedures, or proposed conformity assessment procedures, which are operated within its territory;
- (d) The membership and participation of the Member or of relevant institutions within its territory, in international and regional standardizing bodies and conformity assessment systems; and
- (e) The membership and participation of the Member or of relevant institutions within its territory in bilateral and multilateral arrangements within the scope of the Agreement.

The Standardisation Department also houses Guyana's Codex Contact Point which:

- (a) Act as the link between the Codex Secretariat and Member Countries;
- (b) Coordinate all relevant codex activities nationally;
- (c) Receive all codex final texts (standards, codes of practice, guidelines and other advisory texts) and working documents of codex sessions and ensure that they are circulated to those concerned nationally;
- (d) Send comments on codex documents or proposals to the Codex Alimentarius Commission and/or its subsidiary bodies and/or the Codex Secretariat;
- (e) Work in close cooperation with the National Codex Committee;
- (f) Act as a channel for the exchange of information and coordination of activities with other codex members;
- (g) Receive the invitation to codex sessions and inform the relevant chairpersons and the Codex Secretariat of the names of participants from Guyana;
- (h) Maintain a library of codex final texts; and
- (i) Promote codex activities nationally.

5.1 Standards Development

5.1.1 Status of standards development

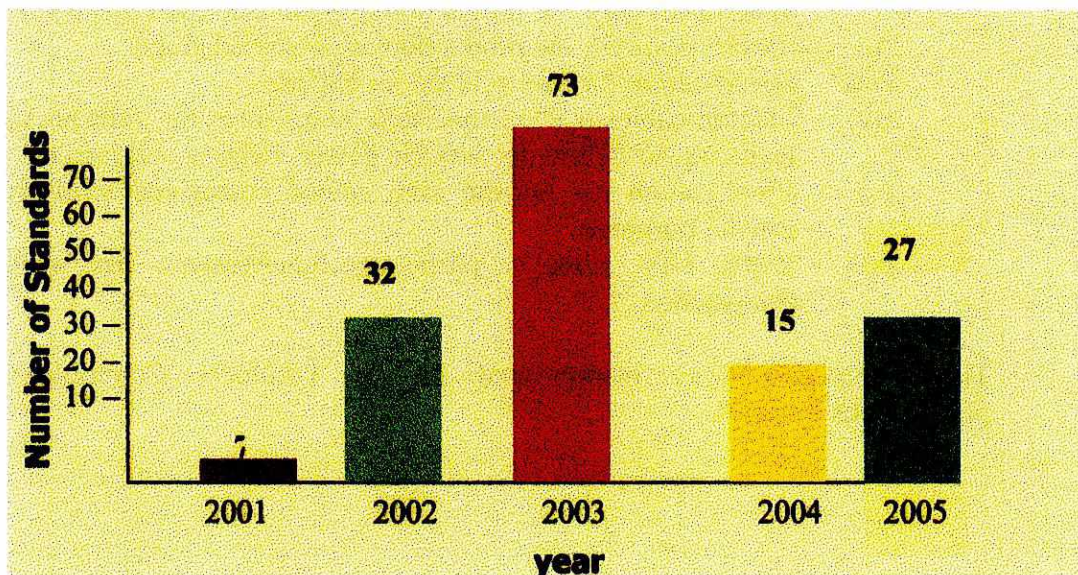
5.1.1.1 Standards approved

Table 13
Standards production

Table 13. shows the development and production of standards over a five year period.

	Year				
	2001	2002	2003	2004	2005
Standards approved by National Standards Council (NSC)	7	32	73	15	27
Standards in publication.	200	203	267	305	322

During the year 2005, twenty-seven (27) National Standards (13 formulated, 9 revised and 5 adopted) were approved by National Standards Council. (See Appendix). The bar graph below shows the number of standards approved by NSC over a five year period.



During the period 2001-2005, the variation in the number of standards approved by NSC was due to the following challenges:

- (i) The lack of a quorum at Council meetings during 2001 and the postponement of the appointment of Council Members for 2001/2002. This hampered the approval of proposals for the commencement of development of new standards, approval of draft standards to become national standards and requests for national standards to be made mandatory.
- (ii) Inadequate number of computers and Standards Officers delayed the processing of standards.
- (iii) Some members of Technical Committees and other stakeholders were not reviewing standards and forwarding comments or attending meetings at the Bureau. This caused delays in achieving consensus decisions.
- (iv) Working drafts or base documents were not available or procured on a timely basis due to the scarcity of funds.
- (v) Unavailability of relevant standards or documents which are referenced in the work programme. In some standards, many reference documents needed were very costly.

5.1.2 Standards proposed

Six proposals for the development of national standards were approved by NSC. These were:

- (i) Specification for the production of processed tumeric powder
- (ii) Specification for the production of processed ginger
- (iii) Specification for lead acid starter batteries
- (iv) Electric cables – PVC insulated, non cables for voltages up to and including 450/750v, for electric power, lighting and internal wiring
- (v) Specification for hot-dip zinc coated corrugated steel sheets for general purposes
- (vi) Rapid HIV tests – particular requirements for quality and competence.

These proposals were incorporated in the Technical Committees' work programmes for 2006.

5.1.3 **Compulsory standards**

A Memorandum requesting Cabinet to approve the national standard, GYS 264:2003, Specification for the storage, handling and transportation of liquified petroleum gases (LPG) cylinders, was submitted to the Honourable Minister of Tourism, Industry and Commerce. The Minister requested a wider public consultation and more education and sensitization on the standard before submission to Cabinet for approval. The GNBS started the consultation sessions in Georgetown, which would move to other areas in the country.

5.2 **Regional Activities**

5.2.1 **CROSQ Bill**

A Bill was prepared by the GNBS in collaboration with the Attorney General Chambers to give effect to the Inter-Governmental Agreement establishing the Caricom Regional Organisation for Standards and Quality (CROSQ). Following Cabinet's approval, the Bill was forwarded and approved by Parliament thus giving the CROSQ's operations the force of law in Guyana.

The Agreement allows for the development and application of harmonized regional standards, technical regulations, conformity assessment procedures and metrology which are essential for the efficient operations of the Caricom Single Market and Economy and, in particular, the international competitiveness of goods and services produced or provided in the Caribbean Community.

5.2.2 **Consultations on CARICOM Standards**

The GNBS conducted public consultations on the following draft caricom standards which were under formulation by CROSQ:

- (1) Requirements for advertising.
- (2) Specification for carbon steel bars for the reinforcement of concrete.
- (3) Specification for QAC – based aromatic disinfectant.
- (4) Specification for synthetic laundry detergent
- (5) Specification for hand dishwashing detergent.
- (6) Specification for steel nails.
- (7) Draft procedure for the management of technical work of CROSQ.
- (8) Certification procedures for products, processes and services covered by regional standards.
- (9) List of regional Technical Committees and Sub-Committees.
- (10) Proposal for the development of a Caricom Standard for packaged natural coconut water.

- (11) Specification for canned sausages.
- (12) Specification for coconut oil.
- (13) Specification for brown sugar.
- (14) Specification for white sugar.
- (15) Paint: Exterior and Interior Emulsion type.
- (16) Paint: Exterior and Interior Modified Alkyd.
- (17) Limitation of lead in paints.
- (18) Fruit juices and drinks.

Some of Guyana's comments were considered and incorporated into the revised draft standards and documents.

5.2.3 Adoption of CARICOM Standards

The GNBS adopted five Caricom Standards as National Standards. These were:

- (1) Medical laboratories – Particular requirements for quality and competence.
- (2) Code of Practice for blood banks and transfusion services.
- (3) Specification for synthetic laundry detergent powder.
- (4) Specification for quaternary ammonium compounds (QACs) aromatic disinfectant.
- (5) Specification for hand dishwashing detergent.

5.2.4 GNBS as a Regional Secretariat

The GNBS was assigned as the Regional Secretariat for the Regional Sub-Committees on the products rice, sugar, rum, brewery products, toilet soap and laundry soap; and the Regional Technical Committee for textiles and garments. This assignment was made by CROSQ in the Regional Standards development framework. The GNBS thus coordinates the development of regional standards based on the said products.

5.3 International Activities

WTO/TBT Enquiry Point

Guyana's standards development work programme (January to June 2005), Notification of the Code of Good Practice for the preparation of Guyana's standards, and the Notification of Guyana's intention to make specification for the transport, storage and handling of Liquid Petroleum Gases (LPG) mandatory were submitted to the WTO Secretariat. Several countries made requests for copies of the standard.

5.4 National Building Code

The National Building Code Committee was set up under the Civil Engineering Technical committee, with the premier task of developing different Sections of a National Building Code and have these approved as National Standards. These codes would then be promoted for implementation and enforcement so as to have a positive impact on the construction industry. The Sections of the Code previously completed were subjected to a review process to make them current, while five (5) new Sections were identified and work carried out accordingly.

The Sections of the Code under review were:

- 1) Administration and Enforcement;
- 2) Fire Safety, Use and Occupancy;
- 3) Electrical;
- 4) Plumbing;
- 5) High Rise Buildings;
- 6) Medium Rise Buildings and
- 7) Concrete and Block Masonry.

The new Sections of the Code under formulation were:

- 1) Loadings;
- 2) Excavation and foundation;
- 3) Reinforced concrete trestles;
- 4) Solar Energy Systems and
- 5) Housing Schemes and Environment.

The Sub-Committee responsible for each Section of the Code had commenced working early in 2005.

Work achieved by Sub-Committees

Work commenced in the review process for most of the listed standards but only a few reached mutual conclusion.

5.4.1 Review of Building Code Sections

The Sections of the Code based on Administration and Enforcement and Fire Safety, Use and Occupancy were reviewed, sent for public comments, and the revised documents were approved by Standards Council at its last meeting held in November. Work halted on the other Sections of the Code because the respective

Sub-Committees requested funding for such work, which funding was not available.

5.4.2 Development of new Sections of the Code

The draft Section of the Code on Excavation and Foundation was completed, sent for public comments, and the revised document was approved by Standards Council at its last meeting held in November. While work was continuing on the other Sections, viz., Loadings, Reinforced concrete trestles, Solar Energy Systems and Housing Scheme, the question of funding was raised for such work by each Sub-Committee. Such funding was not available in 2005, but this matter would be explored further early in the new year.

5.4.3 New Sub-Committee established

Under the Building Code Committee, a new sub-committee was set up on request of the PAHO Health Officer, Dr. Teofilo Monterio who stated the need for a standard on septic tank and latrine sewerage. The Chairman, Mr. Melvyn Sankies, approved the establishment of this Committee to develop the standard. The meetings were hosted at the PAHO Headquarters in Brickdam, Georgetown. This Committee will continue with its work on the standard.

5.5 Codex Activities

A Codex Secretariat has been formally established at the GNRS, staff identified to manage the Secretariat, and a work programme designed and approved by the National Codex Committee for execution. The Secretariat carried out a range of activities according to the work programme, as listed below:

5.5.1 Management of codex standards and documents

- (i) Five (5) final Codex Standards were used in the preparation/revision of the following Guyana National Standards:
 - Specification of classes of milk and milk products;
 - Specification of papaya;
 - Specification of pineapples; and
 - Specification for mangoes.
- (ii) Draft Codex standards/documents for the 27th Session of the Codex Committee on Fish and Fishery Products, the 33rd Session of the Codex Committee on Food Labelling, the Technical Working Group-Traceability/Product Training, the 38th Session of the Codex Committee on Food Additives and Contaminants and the electronic working group on

Food Labelling of GMF were submitted to National Stakeholders for comments.

- (iii) Circular letters: Request for comments on draft codex standards on processed tomato concentrates, preserved tomatoes and canned citrus fruit; request for comments on proposed draft revised code of practice on processing/handling quick frozen foods; and working group on substance evaluation were sent to relevant stakeholders for comments.
- (iv) National Codex Committee meetings were held on April 27, May 31, September 01 and November 09, 2005 to review documents at the 27th Session of Codex Committee on the Fish and Fishery Products, the 33rd Session of the Food Labelling, Technical Working Group of Traceability/Product Training, and Guyana's policy paper on GMOs and GMFs.
- (v) Guyana's comments were prepared on Draft Codex Standards/document tabled at the 27th Session of the Codex Committee on Fish and Fishery Products, the 33rd Session of the Codex Committee on Food Labelling, The Technical Working Group and Traceability, Product Tracing and the Coordinating Committee for Latin America and the Caribbean guidelines for Food Safety in Tourist Zones.
- (vi) Comments received in relation to the Coordinating Committee for Latin America and the Caribbean (CCLAC) survey to evaluate members Codex Standards related needs was forwarded to CCLAC.
- (vii) A Public Consultation Session was conducted with stakeholders of the Seafoods Sector on July 09, 2005 to update them on the outcome of the Codex Committee on Fish and Fishery Products meeting and to solicit their commitment to continue work in the sector.
- (viii) The Technical Working Group- Seafood to be chaired by Dr. Colin James, Director, Veterinary Public Health Department, was formed. Some agencies are still to nominate/indicate their nominated representatives to sit on this Committee.
- (ix) The Codex Secretariat Work Programme for 2006 was prepared and approved by the National Codex Committee (NCC).
- (x) The Codex Trust Fund application for 2006 was completed and submitted to the Codex Trust Fund, Rome, Italy. The Codex secretariat is awaiting a response.

- (xi) A draft funding proposal to solicit funding for the activities of the Codex Secretariat was prepared and submitted to the Guyana Trade and Investment Support Agency.
- (xii) A public consultation session was conducted for key stakeholders in the Food Safety and Tourism Sectors to review Draft Codex Guidelines for Food Safety in the Tourist Zones

5.5.2 Sensitization of Stakeholders on Codex Matters

- (i) A questionnaire was prepared to gather feedback on the effectiveness of the Codex Newsletter and disseminated to National Stakeholders. The results showed that most stakeholders (63%) felt the newsletter was very good with a 100% response that it was informative.
- (ii) A total of four hundred and sixty -two (462) hardcopies of codex documents were disseminated for information purposes to the Ministries of Health and Agriculture.
- (iii) Quarterly editions (1st, 2nd, and 3rd) of the Codex Newsletter were disseminated to National Stakeholders to educate them on Codex matters occurring nationally and internationally. The 4th quarter edition is presently set for typing and reviewing by the relevant persons before dissemination to stakeholders.
- (iv) A symposium on Genetically Modified Foods and Organisms was held on October 12, 2005 at the Sea Breeze Hotel, to sensitize stakeholders on the current issues.

5.5.3 Effective Communication

- (i) The first draft of the Codex Web page was completed and submitted for review.
- (ii) The following data bank (email lists) were established:
 - National Committee- 25 members
 - Foods and Fruits Processing- 9 members
 - Food Additives and Contaminants- 4 members.

5.5.4 International meetings

Guyana attended the following meetings:

- (i) 27th Session of the Codex Committee on Fish and Fishery Products in South Africa, Feb 28-March 04, 2005.

- (ii) 33rd Session of the Codex Committee on Food Labelling in Malaysia, May 09-13, 2005.
- (iii) Technical Seminar on Inter-hemispheric Cooperation on Codex, Mexico City, May 15, 2005.
- (iv) Caricom Regional Workshop on enhancing the participation of developing countries in the work of the Codex Alimentarius and the Codex Committee on Residues of Veterinary drugs in Trinidad and Tobago, September 21-23, 2005.
- (v) 14th Session of the Codex Committee on Food Import and Export Inspection and Certification Systems, Australia , November 28- December 02, 2005.
- (vi) Codex Training Session and Regional Conference on Food Safety for the Americas and the Caribbean, Costa Rica, December 03-09, 2005.
- (vii) Regional workshop on Codex and WTO/SPS Agreement, Jamaica, February 10-18, 2005.

5.5.5 Codex mail box

The Codex mail box was monitored daily. Incoming mails were received and the following actions taken:

- documents for comments and/or information were forwarded to national stakeholders; 1 copy being printed and filed.
-
- documents requiring further actions were printed and appropriate actions taken;
- other documents were sorted by subject and placed in the appropriate e- subject folder; and
- unwanted mails were deleted.

6.0 INFORMATION SERVICES PROGRAMME

6.1 COMMUNICATION

The Communication Division had another very hectic but productive year as programme activities intensified at the Bureau of Standards. With the dedication and persistence of staff, the Division was able to fulfill its mandate to provide communication support to technical departments, educate and sensitise stakeholders about GNBS activities, organize GNBS participation in exhibitions and national events and advise consumers on matters relating to the selection of quality goods. To effectively execute its duties various communication strategies were employed.

6.1.1 Programme Support

Vital programme support was continuously provided by the Division to ensure that communication inputs were an integral part of all the key programme activities of the Bureau. Below are the major activities which were undertaken and successfully executed:

6.1.1.1 Promotion of the Standards Mark Scheme

The Communication Division spearheaded a campaign to promote the Standards Mark Scheme, increase participation in the scheme and educate consumers about the significance of the mark. The launching activities took place on **Thursday, August 18, 2005** in the GNBS Training Room. Media houses, GNBS staff and awardees of the standards mark attended. Holders of the mark also set up mini displays, answered questions from the media and made remarks.

New television and radio advertisements, coloured posters and flyers were produced to spread the message about certification and its benefits. Posters were presented to holders of the mark to be posted up at their premises while flyers were sent to banks, insurance companies, hospitals and other public places for distribution to the public. The campaign lasted for six weeks and from reports, holders of the mark were very appreciative of the efforts of the Bureau to help to boost the scheme.

6.1.1.2 GNBS/ GFC Joint project

The Guyana National Bureau of Standards (GNBS), in collaboration with the Guyana Forestry Commission (GFC), carried out a joint project to ensure that verified measuring devices are used to measure lumber, regularize units for measurement and implement quality procedures within the lumber sector.

The programme which targeted sawmills and lumber yards in Regions two, three, four, five six and ten, was done in two phases.

Firstly, there was the education and sensitization phase during which training sessions were held in Guyana's three counties after which, there was the surveillance period to (1) ensure that only verified devices were used to sell lumber (2) educate and sensitise lumber yards on the metric system and how it can be used to sell lumber, and (3) introduce the concept of labelling of wood species to guide consumers and to verify that the lumber sold to consumers was of acceptable quality.

During the education phase, symposia were held in the three counties of Guyana and officers of both entities made presentations on: *Timber grading rules, The importance of measurement in the timber sector and Metrication in the timber sector*. This was followed by lively discussions especially on the metric aspects, as participants felt that they should continue to use the old system. They were also divided on the question of labelling of lumber species although they thought it was useful.

Results from surveillance visits revealed that lumber for local use was mainly sold by board measurement (imperial units), while wood for export was sold in metric quantities and various kinds of unverified devices were used for measurement of lumber thus verifying consumer complaints that they were being robbed.

In spite of the challenges, officers were able to obtain commitments from retailers of lumber with respect to their willingness to obtain verified metric devices with which to sell lumber and also to implement metrication in their operations. This activity will continue in the New Year to ensure conformance.

6.1.1.3 Other Programme Support activities

The Division also arranged press briefings, symposia, chaired opening and closing ceremonies for training courses, organized news interviews, responded to correspondence written by members of the public seeking information and seeking redress on consumer matters and edited printed materials such as the Standards Information Bulletin, brochures and fact sheets.

Below are other collaborative activities which took place during the year 2005.

- (1) Launching of the Audit Service Programme
- (2) Presentation ceremony for Lead Auditor's Course
- (3) Symposium: promoting standards in the lumber sector.
- (4) Meeting of concrete block manufacturers
- (5) Meeting of stakeholders in the poultry sector
- (6) Symposium on Good Laboratory Practices
- (7) Public Consultation on LPG cylinders

6.1.2 Promotional Activities

As a means of publicizing GNBS activities under its various work programmes, the following activities were executed:

6.1.2.1 GNBS Newsletter

The GNBS newsletter continued to be produced on a quarterly basis to capture the highlights of activities undertaken during the quarter. This year one change was incorporated to enhance its appearance. It is now produced on glossy paper.

About two hundred and fifty copies were distributed each quarter to stakeholders such as libraries, members of National Standards Council, Sister Bureaus, Government Ministries, other regulatory agencies and non-governmental bodies.

The newsletter is a timely means of sharing information and updating sister agencies on the Bureau's activities as its content includes status of standards, weights and measures update, a front page feature article and other events that occur during the quarter.

Comments received from stakeholders revealed that the content is useful and serves as an information tool.

6.1.2.2 World Consumers Rights Day activities

As is customary, World Consumers Rights Day is commemorated annually on March 15. This year, the theme chosen by the umbrella body, *Consumer International* was "Consumers, say no to GMO's" where the focus was on the safety of genetically modified foods and the need for labelling same.

In keeping with its primary function which is to protect consumers through standardization, the GNBS joined forces with the Ministry of Tourism, Industry and Commerce to plan suitable activities.

The Bureau's participation included appearances on two live television programmes aired on NCN television, where staff members took the opportunity to highlight the role that the Bureau plays, in providing protection for consumers. Among the key issues raised by callers was the need to stop poor quality goods at the ports of entry rather than at the sales outlet.

The Bureau also prepared a World Consumer Rights Day message for the newspaper supplement, which focused on the need for labelling genetically modified foods.

The topic is still very new especially among consumers and much more education needs to be done to make consumers aware of its implications.

6.1.2.3 Regional Visits

The Communication Division embarked on visits to Regions outside of Georgetown to take the message of standards and quality to residents of Regions number 2, 6, 7 and 10 and hold discussions with members of the respective Chambers of Commerce.

The Officers also hosted live television programmes in these Regions and visited stores, municipal markets and supermarkets to have a first hand look at the quality of goods sold on these markets, listen to consumer complaints, check on labelling violations, and promote the programmes of the Bureau.

From the feedback obtained, residents welcomed the visits and requested that GNBS officials visit more frequently to conduct surveillance activities and deal with businesses which have been treating consumers' concerns with disregard and failing to give consumers their correct weight. While GNBS would be happy to accede to all the requests, it has to raise more funds to expand on the volume of activities that can be undertaken.

Members of the various Chambers of Commerce expressed their appreciation to GNBS staff for the opportunity afforded them to have their concerns addressed and also made requests for technical assistance to help small businesses improve the quality aspects of their operations and make available the necessary education materials. As a result, Information packages and other materials were made available at the Regional Administrative Offices or at offices in the Sub-Regions.

The Regional visits revealed that consumers in other Regions need mechanisms by which their concerns can be heard and addressed on a continuous basis.

6.1.2.4 View Points

Once per month, the Executive Director of the GNBS continued to share his views on topics pertaining to standardization in a number of sectors. During this year, ten programmes were aired on the Voice of Guyana (NCN) radio. Topics aired were: *“Consumer Protection”, “We should all eat organic,” “The poultry Industry will collapse without standards,” “A National Building Code”, “Conformity Assessment”, “Public perception of local goods must be changed,” “The need for Standards Education”, “All genetically modified foods must be labelled”, “Public Sector procurement of Standards Compliant goods” and “Let Standards be the pillar for Tourism”.*

The view points which provided a wealth of information were also published in the Guyana Chronicle.

6.1.2.5 Information Dissemination

One of the key functions of the Division is to disseminate information on GNBS work programmes to stakeholders, country wide.

Several strategies were used and they took the form of advisories, releases, lectures, live programmes etc.

Table 14
Activities of the Communication Programme

No	Name of Activity	Year 2001	Year 2002	Year 2003	Year 2004	Year 2005
1	No. of press releases issued	12	22	20	24	27
2	No. of editions of Standards Advisory (Formerly Standards. Bureau and you)	25	12	15	44	44
3	No. of editions of Standards-Corner.	50	26	16	23	35
4	No. of notices published	18	22	27	39	52
5	No. of press briefings held		04	04	09	09
6	No. of school lectures held	03	07	06	03	04
7	No. of live Radio / TV programmes	-	11	-	03	07

The figures in the table above show the number of activities undertaken by the Communication Division to support the programmes of the technical departments disseminate information to stakeholders and promote significant events.

Over the five year period, modifications have been made to some programmes to better suit the needs of stakeholders. For example, "*Standards Bureau and You*" was changed to "*Standards Advisory*".

For the current year 2005 the press briefings highlighted matters such as: the National Building Codes, standards approved by the Standards Council, launching of the Product Certification campaign, achievements /projections of the Bureau, seizure of nonconforming devices and the implementation of the new system at Customs House.

These activities had some impact on stakeholders as follow-up inquiries were made by callers on the telephone and by letters to the editor seeking clarification on consumer and standards related matters. However, in order to increase the volume of promotional activities, more financial resources need to be injected by the Bureau.

6.1.2.6 Magazine articles

The Division also made use of opportunities to write articles for placement in stakeholder magazines.

During this year, three such articles were placed in the GUYEXPO magazine and one was placed in the GMA magazine. The titles of articles placed in the GUYEXPO magazine were, "*Quality must become our culture*", "*Public perception of local goods must be changed*" and "*Small Businesses are critical to National Development*". The article prepared for the GMA magazine was titled, "*Should standards be sold or distributed free of cost?*"

6.1.2.7 Live Programmes

Invitations to participate in radio (Let's Gaff) and television programmes (the Consumer and you) as guests to share information on specific topics relating to the work of the Bureau were extended and staff members of the Communication Division and the relevant Technical Officers attended.

During this year, the Bureau participated in five such programmes and topics such as metrication, weights and measures, consumer rights, cellular phones were discussed. This is another means by which consumer information is disseminated.

6.1.3. National Events and Exhibitions

6.1.3.1. Berbice EXPO

The first ever Berbice Trade Fair and Exposition was held during the period July 01 to 04 at the Albion Sports Complex ground, Corentyne, Berbice and presented the Standards Bureau with the opportunity of emphasising the message of the relevance and importance of *standards and quality with residents in Region number 6.* The theme of this exhibition was, *"Pride in our Industry-the Ancient County a new frontier."*

The Bureau took the opportunity to educate its stakeholders about its role and functions and the many activities it was executing under the various work programmes. Another area of emphasis was highlighting the application of standards in the manufacturing, building and construction, and weights and measures sectors.

During the exhibition, scores of persons visited the booth to seek information and have their complaints addressed. Among the concerns raised were the need for more public awareness programmes (especially in the area of metrication, and import quality) in Region number six and making standards available for sale there.

Visitors to the booth were given printed materials in the form of brochures and fact sheets.

6.1.3. 2 GUYEXPO 2005

Another opportunity to promote standardization presented itself during the staging of GUYEXPO 2005 and the Bureau once more participated in this event, Guyana's largest trade fair and exposition which attracted thousands of visitors per session.

This year, for the first time, the GNBS along with other agencies under its subject Ministry (Ministry of Tourism, Industry and Commerce), participated as one unit at this event.

The exposition was held over the period **September 22 to 27 2005** under the theme **PRIDE IN OUR INDUSTRY** and the Bureau showcased the activities of its core programmes namely: Standardization, Weights and Measures, Standards Compliance, the Standards Mark Scheme, Metrication and Conformity Assessment and Laboratory Certification.

Scores of visitors to the booth were able to check their body mass in metric and obtain metric materials. They were also able to see practical demonstrations using GNBS primary standards in the areas of mass, length and volume and also for the calibration of fuel pumps.

Regarding the compliance programme, commodities monitored by the Bureau to meet labelling requirements (clothing, furniture, concrete blocks and PVC pipes) were put on display together with the relevant standards. Standards showcasing the national building code and agriculture produce were also on display while various defects which can be found on used tyres were also displayed on an exhibit to educate consumers.

The criteria for being granted a permit to use the national standards mark on products were also outlined along with standard marking requirements for gold jewellery. In the case of Management systems, Conformity Assessment principles were highlighted in the form of posters and a display of standards.

Educational materials such as flyers and brochures were distributed to visitors and various posters depicting labelling requirements, certification marks, weighing and measuring tips, ISO 9001, product certification and the standards development process were also displayed.

Persons who visited the Ministry's booth were edified on the various work programmes and also took the opportunity to have their concerns addressed.

From feedback received visitors felt that the Bureau was engaged in a challenging but beneficial task, to make Guyanese aware that through the implementation of standards in every sphere of activity, a better quality of life can be experienced.

6.1.3.3 National Quality Week/ World Standards Day

The Guyana National Bureau of Standards celebrated National Quality Week (NQW) during the period October 10 to 14, 2005. World Standards Day, which was commemorated internationally on October 14, was the focal point of the celebrations.

World Standards Day is a time for reflection and recognition of the efforts put in by men and women around the world in the field of standardisation. The theme chosen for the 2005 celebrations by the International Organisations (ISO, IEC and ITU) was: **"STANDARDS FOR A SAFER WORLD"**

As was customary, a week of activities was planned to mark the occasion. Among the highlights of the week's celebrations were: companies day, the viewpoint of the Director of the Bureau, Dr. Chatterpaul Ramcharran delivered on radio, and GNBS open day during which members of the public and school children were given the opportunity to visit the GNBS and have a first hand look at the activities conducted at the Bureau to enhance consumer protection.

With respect to the open day, live coverage of the activities was provided on Voice of Guyana by NCN Radio from 10:00h to 11:00h, during which Heads of Departments and Programme Coordinators shared with the public, the activities executed under their respective programmes.

Other coverage of the day's activities was provided by both the print and electronic media on the day's activities and pamphlets, fact sheets and brochures were issued to the public while information packages were issued to schools.

A national symposium on genetically modified foods was also held and over 200 participants drawn from the tertiary level institutions, senior secondary schools, government agencies and staff from the Bureau of Standards attended.

On Friday, October 14, (World Standards Day,) a special message to mark the occasion was delivered by Captain Jerry Gouveia, President of the Georgetown Chamber of Commerce on NCN Television and Radio (VOG). Doctor Chatterpaul Ramcharran, Director of GNBS also delivered his message on NCN Television.

A newspaper supplement featuring messages from the President of the Georgetown Chamber of Commerce (Mr. Gerry Gouveia), Chairman of National Standards Council, Mr. Melvyn Sankies and the Director of the GNBS was published in the newspapers. Various television interviews regarding the significance of World Standards Day were also part of the observances.

The staff appreciation day and long service awards ceremony which were also held on World standards day concluded the week's activities and the Honourable Minister of Tourism, Industry and Commerce, Mr. Manzoor Nadir was present, to share his appreciation and thanks not only to the five staff members who were honoured for giving five and ten years of service but also to the management and staff of the Bureau.

The five employees honoured were: Edward Melville Senior Inspector, Candelle Walcott- Boswick, Coordinator, Laboratory Services and Shune' Vickerie Coordinator, Standards Department (5 years) while Shailendra Rai (Senior Inspector) and Tracy Ann Seaforth (Assistant Public Relations Officer) gave 10 years of service.

6.1.4.1 OTHER ACTIVITIES

6.1.4.1 Donations:

In response to letters sent out, agencies in the Public and Private sector, the Guyana Oil Company, FarFan and Mendes and the Demerara Oxygen Company Limited each donated funds to cover the cost of one live television programme on the subject of metrication.

During National Quality week also, Demerara Distillers Limited, Bakewell inc. and Banks DIH Limited donated snacks for school children who participated in the Bureau's Open day programme.

The Bureau welcomes the support of corporate entities that assist in furthering the cause of standardization.

6.1.4.2 Pride in our Industry campaign

The Head, Information Services is the Bureau's representative on the Ministry's Pride in our Industry and has attended meetings in this regard.

The Pride in our Industry campaign is an initiative of the Ministry of Tourism, Industry and Commerce to provide local manufacturers with the requisite skills to produce on a continuous basis, locally produced goods of acceptable quality and prepare these entities for regional competition especially with the coming of the CARICOM and Single Market and Economy.

The campaign also seeks to educate and sensitise local consumers that Guyanese products are also of acceptable, hence the need to support the *Buy Local* campaign.

To date, key stakeholders representing agencies such as the Guyana Manufacturers Association, the Private Sector Commission, MINTIC, EMPRETEC, Consumer bodies and the Small Business Association and the Chamber of Commerce have come on board and have been meeting to devise the most effective plan to make this initiative a success.

Several propositions for funding of this massive campaign are currently being pursued.

6.1.4.3 Other meetings/ events

As the need arose, the Head, Information Services attended meetings and functions on behalf of the organization. These included the graduation of the Bamboo Craft Project, Opening of the New Office of the National Exhibition Centre, EMPRETEC Annual Awards ceremony, GUYEXPO, planning meetings etc.

The Division also prepared correspondence in response to letters sent directly to the Bureau and in the press, completed questionnaires to furnish data for international institutions, researched information for technical staff and participated in training programmes.

6.1.4. 4 GNBS ISO 9001 activities

The Bureau is working towards certification to the ISO 9001 Management system standard as this achievement would consolidate its efforts to have its stakeholders in industry certified. This prestigious award would help the organisation to function more efficiently.

To this end, the staff of the Information Services Department worked closely with colleagues in the Conformity Assessment Department for the completion of the operations manual and relevant work instructions.

6.1.4.5 GNBS/MINTIC activities

In order to execute consumer protection activities more effectively, The Consumer Affairs Division of the Ministry and the Communication Division made a decision to collaborate closely on consumer related activities.

To fulfill this objective, a number of meetings took place after which a subsidiary work programme was developed. Under the programme, the two entities will participate in live television programmes, share in activities such as attendance at symposia and consultation sessions, exchange information on consumer complaints, preparation of materials, share relevant consumer information and data and observe field activities.

This programme has started off in a satisfactory manner and in the coming year, more activities will be undertaken jointly.

6.2.0 STANDARDS INFORMATION

In the period under review, the Technical Standards Information Unit (TSIU) was able to achieve most of its goals. What is required however is a library automated system to enhance the collection department, to make timely retrieval and dissemination of information.

6.2.1 Automation of TSIU

Acquisitions/new documents received by TSIU were recorded by the use of a manual system which is a substitute, until all documents can be input into the library automated system direly needed by this department. Those acquisitions were indexed, classified, labelled and interfiled/shelved by specific subject, title or reference/call numbers in sequence. This is an ongoing activity.

When automation is completed, it would strengthen this collection development and make information sharing worthy. It will also assist libraries to relate with others for the purpose of inter- library loans.

More financial resources would be invested in the New Year to foster the development of the library.

6.2.2 Upgraded Collection

Table 15 shows the amount of documents acquired during a four year period by the Technical Standards Information Unit.

Table 15
Documents received by TSIU

Year	No. of documents
2002	1092
2003	961
2004	1022
2005	1292

These figures demonstrate a rise and fall in the acquisition of materials. From the period 2002 - 2003 there was a decrease by 12%; 2003 - 2004 shows an increase by 6% and 2004 - 2005 also shows an increase of 20.9%. Some of these documents were purchased. With more financial resources allocated in this direction in the New Year, would assist tremendously to enhance the development of this collection.

During this period, it was recognized that Secondary School Students and the University of Guyana students made full use of TSIU.

The University of Guyana Library donated approximately 150 books which are not added as yet to the collection.

It is planned to purchase more text books so that staff could make better use of the collection which would be set up to meet a National Documentation Centre level.

6.2.3 Current Awareness Bulletin

During the period under review, three hundred and eighty (380) copies of Standards Information Bulletin (SIB) were produced by the Technical Standards Information Unit. Eight articles were prepared and sent to various agencies, clients, organisations, institutions and Sector Committees. Articles on the subjects listed in Table 16 were prepared by Technical Officers in relation to their work programmes, and the preparation of the Bulletin was coordinated by the Senior Information Officer.

Table 16
Standards Information Bulletin produced for 2005

Month	Title of Articles
January	The application of standardization to manufacturing. The focus of this article was on tips to producers about what standards could do, once it is implemented into their operations.
February	Publishing ISO 9001:2000 articles. Guidelines were given to managers regarding their management system once it is independently audited and confirmed to ISO 9001:2000 standards.
March	The need for quality. The researcher spoke about quality of products and how competitive a manufacturer has to be to gain access to the global market to satisfy his/her customers.
April	-
May	-
June	Guidelines for the application and use of tyres. Clients, consumers and stakeholders were informed of the importance of vehicle to be selective when choosing tyres for the intended purpose and safe use. The factors discussed were inflation pressure, load, speed, tyre with and temperature grade followed by a labelled diagram of a tyre.
July	-
August	Metrication: Making Progress in Guyana. Highlighted the progress/implementation made in Guyana's metric system with emphasis being placed on the importance of garnering support from all stakeholders.
September	Impact of the CARICOM Single Market and Economy on Laboratories. Emphasis was placed on having proper equipment for testing and calibrating with assistance from international standards.
October	The National Building Code. This material focussed on the weaknesses in the system used by contractors to erect dwelling places in Guyana.
November	Facilitating recognition of conformity assessment activities. The article looked at the importance of conformity assessment to trade.

Articles published by Technical Officers are helpful in information sharing with industries, various agencies, clients and other stakeholders. Interest was expressed by stakeholders and clients about the benefits of these articles.

6.2.4 Profile of Activities

The results of the various activities of the Technical Standards Information Unit during 2005 are summarized in **Table 17** on a monthly basis.

6.2.5 Implementation of Card System

The card system was re-introduced by the Senior Information Officer. All books and materials that were catalogued had cards written for them. Cards were written manually for ninety eight books during this year. Those cards written were by authors and subjects specifically.

With this system in place, retrieval of information is less time consuming for library personnel.

6.2.8 Other Activities

- Approximately 200 ISO standards were withdrawn from GNBS collection. These documents are filed in the archival section for future reference. Some of these standards were withdrawn from ISO system while others were replaced by another standard thus, the reference number(s) had changes made to it/them, so the Guyana Standards that were adopted from ISO had to also be taken out of TSIU stock/collection.
- The Senior Information Officer oriented six new officers about the role and function of the Information Services Department. The new staff members were informed about the tasks and duties done by each officer in the Information Service Department which allowed them to be au fait with who should undertake what, in times of need, or for any request that they may have.
- Requests were made for standards required by the Standards Writing Officer but only a few were received due to cash flow of GNBS.
- Book markers and brochures were designed by the Senior Information Officer with the activities of the department. This is a part of a market strategy to sensitize patrons/clients of what TSIU does and how to get information in the collection.

Table 17
Profile of activities of TSIU

	Activities	Months												Total
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
1	Acquisitions	65	30	193	78	77	87	174	75	301	70	110	32	1,292
2	Books catalogued & classified	-	-	19	29	09	26	06	09	-	-	-	-	98
3	Books bound	-	02	02	04	02	-	09	04	-	-	-	-	23
4	Books Covers Printed				04	01								05
5	Book Markers Printed							20x4						80
6	Books that Date Due Labels were prepared for					105	26	105		08	214	255	-	713
7	Brochures Printed							24			50			74
8	Catalogue Cards Cut			75	130									205
9	Catalogue Cards Written and Filed by Author/Subjects			69	106	68	66	24	40	29				402
10	Date Due Labels Printed							180x6			240			1,320
11	Dissemination of Codex Documents					26	128	96		73	02			355
12	Draft Standards for Public Comments	5									06			11
	- Local	3									3			06
	- International	2									3			05
13	Files Labeled							08	06	10	04	08	11	47
14	Issue Slips Printed								40x4					160
15	Loans													364
	- External				34	15	17	185	39	06	20	40	08	19
	- Internal				02	15	-	-	-	-	-	02	08	19
16	Lettering of Documents				32	-	17	185	39	06	20	38	08	345
17	Newspaper clippings	-	12	73	27	06	12	08	09	21				168
18	New Standards Received	26	21	83	72	75	98	28		64	45		58	570
19	Queries	2	43	54	19	33	21	116	61	27	11	33	6	426

		1	35	31																	
	- External - Internal	1 1	8 8	23 23																	
20	Standards bound	25	108	103	14	77	38	46					06	26	37					480	
21	Standards cover printed	25	125	98	14	83	31	46					06	26	37						491
22	Standards Information Bulletin Printed	100	20	35	-	-	30	70					30	35	30						380
23	Standards Issued Free		02										02	03	07						14
24	Standard Sold		03	11	07	32	08						23	21	13						138
25	Standards Stripped due to Standardization Department Project.			110	21	39	05							01							176
26	Usage of the internet facility	17	12	40	38	26	36	44					06	07	25						328
27	Visitors	01	06	12	15	08	11	23					13	04	36						203

The one hundred and thirty eight standards that were sold represent a total of six hundred and eighty six thousand, seven hundred (\$686,700.00) dollars. This figure when compared to last year has demonstrated an increase in sales by 5.05%.

- External and internal course materials had indexed prepared to make information user-friendly for staff. This task was done to retrieve reports written by officers on their return from courses locally or internationally.
- Stock taking was done for CROSQ and COTED documents.
- Regional and International Standards were updated.
- CARICOM Senior Project Officer, Ms. M. Newton, completed the assignment of 33 ISBN's for GNBS standards during this period.

6.3 METRICATION PROGRAMME

The Metrication programme is one of four programmes under the Information Services Department.

In 2005, Metrication made satisfactory progress as education and sensitization activities increased and many more stakeholders were targeted with metric messages. The four commonly used units for mass, length, volume and temperature were the areas focused on, as well as strategies to help vendors introduce the metric system in their operations.

6.3.1 National Metrication Committee (NMC)

The National Metrication Committee was chaired by Mr. Narvon Persaud (Council Member) and comprises members drawn from key stakeholder organizations such as the Guyana Police Force, the Guyana Forestry Commission, the Lands and Surveys Commission, Guyana Consumers Association, Ministry of Public Works and Communications, Ministry of Education, Guyana Rice Development Board, Ministry of Agriculture and the Vendors Association.

This Committee met once monthly and its main objective was to provide much needed support, devise fresh strategies and provide technical guidance for the execution of the National Metrication Programme.

During the year, six (6) meetings were held. However, due to the disaster of the floods no meetings were held in January and February. .

Members of the Committee were able to arrange training for members of their respective organizations(e.g Guyana Police Force), participate in live television programmes, distribute metric materials on behalf of the GNBS during field activities sponsored by their agencies, ensure that road signs were posted up in metric(Ministry of Public Works) and assist in soliciting sponsorship for live programmes.

The work of the NMC is vital to the success of the national metrication programme.

6.3.2 GNBS/GFC Project

Emanating from discussions held at the National Metrication Committee meeting, the Guyana National Bureau of Standards and the Guyana Forestry Commission commenced a joint project to target the sawmills and lumber yards with the metric message.

The countrywide campaign which commenced in March comprised education and sensitisation activities followed by surveillance visits to lumber yards countrywide. This exercise involved officers from both agencies (GNBS & GFC) and sought to encourage the use of the metric system by lumber yard dealers and sawmillers.

Table 18
Visits to lumber yards and sawmills

Region	Area covered	Number of stakeholders visited
3	Parika, Vreed-en-Hoop and Wales	18
4	Georgetown, East Bank & East Coast of Demerara up to Mahaica.	26
5	Mahaicony and Rosignol	15
10	Mackenzie, Wismar, Old England.	12
TOTAL		71

(See Communication report Section 6.1.1.2, for further details)

6.3.3 Sector Activities

Another very successful method that was used to reach stakeholders with the metric message, was sector visits. These visits were significant in that they targeted senior management operatives at the agencies listed to solicit their support, determine training needs and the status of metrication in the organization, provide assistance for the implementation of metrication, review existing legislation, and come up with a workable plan of action for the implementation of metrication.

Eighty five (85) visits and subsequent meetings were conducted with management representatives of various organizations as listed below in **Table 19**.

Table 19
Metrication sector visits

No. of Organisations	Sectors	Names of Agencies
8	State Agencies	Geology and Mines Commission, Lands and Survey Commission and Public Utilities Commission
24	Government Ministries	Ministry of Health, Ministry of Finance, Public Service Ministry, Ministry of Foreign Affairs, Ministry of Legal Affairs, Ministry of Local Government etc.
17	Media Houses and Advertising Agencies	NCN Radio and Television, King's Advertising, Prime News, Guy Enterprises, VCT Network, Stabroek News, Guyana Chronicle etc.
29	Local Manufacturing Agencies	Gafoors Industries Ltd, Continental Industries Ltd, Guyana Thermoplastic Ltd, Brass Aluminum and Cast Iron Foundry
7	Non- Governmental Organisations	Guyana Red Cross Society, Youth Challenge International.-

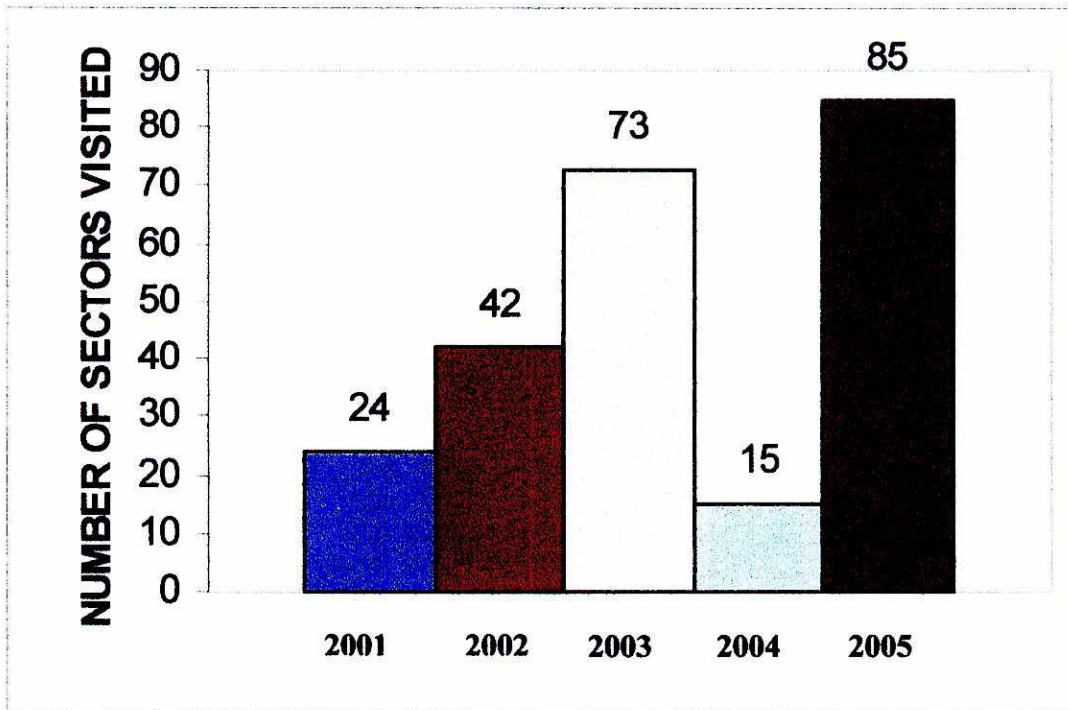
With respect to State agencies and Government Ministries, it was observed that not much work was done regarding the implementation of metrication and it was sometimes challenging to meet senior functionaries who were in a position to effect changes to existing practices. Intensive training needs to be done to address these needs in the coming year.

On the other hand, media houses and advertising agencies have given heartening support in the past year. However, there is still room for improvement, especially in the area of advertising in the electronic media, as media houses complained that their clients requested advertisements to be done in imperial units.

The local manufacturing businesses must be commended for the level of implementation. Because they have adopted the strategy of pre-packaging, they are able to sell their goods in metric. Also because their overseas buyers request goods in metric sizes and quantities, they are forced to satisfy these orders.

Figure 4 shows a comparison of sector activities for the last five (5) years.

Figure 4
Metrication Sector activities



From the chart, the year 2004 showed a decrease in sector activity due to the shortage of manpower and the loss of members of the National Metrication Committee. However in 2005, there was an upsurge in activity as additional assistance was provided by the Regional Sub-Offices and the appointment of new Weights and Measures Officers in the Regions.

The sector activities will continue in the New Year and it is hoped that more agencies will come forward for training and afterwards, full implementation of the metric system.

6.3.4 Metrication Training

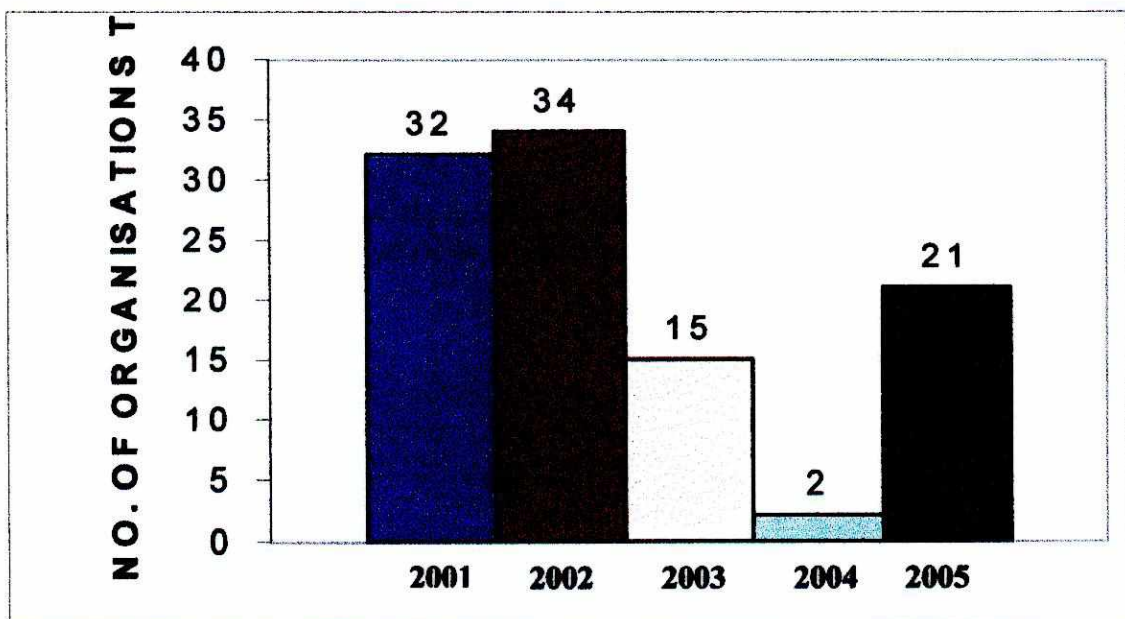
The Metrication Division offered training to all agencies that made requests for such training. The training programme which followed a workshop approach, focused on getting participants to *“Think metric”*. Hence, there were a number of practical activities and role playing in the sessions which were very interactive.

Twenty-one (21) organizations benefited from metrication training in 2005. Where necessary, training was tailored to suit their respective work situations. For example, the training for the lumber sector emphasized the conversion from board measurement to cubic meters and cubic centimeters. **Table 20** below shows some of the agencies that received metrication training:

Table 20
Organisations involved in metrication training

No.	Name of Organisation	Number Trained
1	Guyana Police Force – (Traffic ranks)	26
2	Guyana Defence Force – (Senior Officers)	20
3	Master Butcher – (Municipal Abattoir)	8
4	Georgetown Public Hospital	119
5	Ministry of Housing and Water	40
6	Guyana Telephone and Telegraph Co. (Contractors)	21
7	Guyana Thermo Plastics Limited	15
8	Guyana Rice Development Board (Farmers, Millers and other stakeholders)	360
9	National Centre for Education Resource Development	18
10	Sophia Special School	41
11	Gobins Variety Store	11
12	Alim Shaw's Dry Goods Store	9
13	Gold Smiths in Bartica	8
14	Shop keepers in St. Cuthberts Mission	21
15	Inspectors of GNBS (Regions 4, 5, 6, 7, 9, 10)	7
16	Municipal Markets – Bourda, Stabroek, La-Penitence	1,234

Figure 5
Number of organisations receiving metrication training



Following the resuscitation of the National Metrication Committee in 2001, and the passing of the Order No. 4 in 2002, to make the metric system the only legal system for measurement, there was an upsurge in requests for training. This trend continued in 2002 but diminished in 2003 and 2004 with the loss of Metrication Officers. Some amount of normalcy returned in 2005.

6.3.5 Metrication in Commerce

The Metrication Division especially targeted the commercial and retail sectors which proved to be most challenging. This activity entailed visiting of shops, stores, stalls, and supermarkets country wide, holding one-to-one discussions with vendors and shopkeepers, doing practical demonstrations and having a first hand look at the practices employed by vendors and shopkeepers regarding selling in metric.

From observations, vendors and retailers continued to sell goods in imperial quantities although they were in possession of metric devices. It was also discovered that imperial substituted measures and masses were used for selling. Because of these malpractices consumers were sometimes robbed in the process.

However, one area in which significant cooperation was received was in the sale of rice. Vendors agreed to stop selling rice using liquid measures and made efforts to obtain suitable scales to conduct this operation. Efforts would continue to implement this new method.

6.3.5.1 Strategies employed in the Commerce sector to help vendors

In an effort to help vendors and shopkeepers in the retail sector to master the metric system, the following strategies were implemented:

(i) The use of price charts

Vendors/retailers were advised to post up price charts displaying prices for goods in metric quantities and they were given practical demonstrations in this regard.

(ii) Prepackaging of goods

Another strategy which was shared with vendors / shopkeepers was prepackaging. It was observed that this method was working for supermarkets and if vendors should prepackage their goods consumers will buy in metric.

Generally, vendors expressed mixed views about the use of metric system. Most of them complained that consumers were still demanding items in imperial units while others were reluctant to initiate change, fearing other vendors will not comply and will steal their customers.

However, it was heartening that vendors were showing a willingness to use the metric system, and the supermarkets and mini-marts are leading the metrication drive by pre-packaging all items and labelling and pricing goods in metric.

Observations during surveillance exercises showed that prepackaged and canned products imported from the United States, Canada, the Far East were labelled in a dual format, using sequences of imperial units followed by metric units or vice versa.

Ninety – nine (99%) of local, pre-packed products were correctly labeled in metric with only 1% of non conformance.

The large textile importers imported their bales of raw textiles in metres, but the retailers are forced to retail their textiles in imperial quantities due to public demand.

They were advised not to do so.

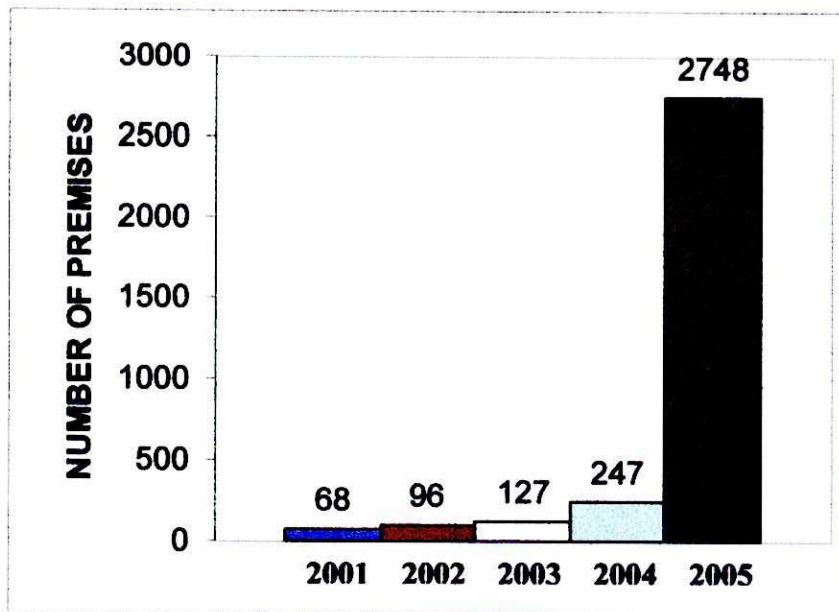
Out of the metric out reach programme, it was also discovered that senior members of population, were least cooperative and were holding on to the imperial system.

6.3.5.2 Surveillance activities in the Commerce Sector

Table below was the areas covered in the surveillance exercise for 2005.

Region	Areas covered	Number of stakeholders
2	Anna Regina, Charity, Suddie and Adventure	759
3	Leguan, Wakenaam, Parika, Wales and Vreed-en-Hoop.	116
4	Stabroek, Bourda, Kitty and La Penitence Markets, Shops, Supermarkets and St Cutberts Mission.	1,235
5	Mahaicony, Rosignol and Fort Wellington Markets and shops at Moraikabai	366
6	New Amsterdam, Rose Hall and Port Mourant Markets Orealla and Siparuta.	146
7	Geica (shops, supermarkets and Municipal market).	106
TOTAL		2,748

Figure 6
Comparison of Metrication Surveillance activities



The graph shows that there was a large volume of surveillance activities conducted in 2005 due to the combined efforts of Officers in the Regions.

6.3.6 Public Awareness Activities

In order to sensitise and educate the public on the basic tenets of the metric system and to help them to discover ways to *Think Metric*, live telecasts were aired in Regions number 3, 4 and 10. These programmes helped to make consumers aware of some of the malpractices engaged by vendors. A six week campaign was also conducted on radio where metric messages were aired. (See Communication report)

6.3.7 Metric Misuses

The Metrication Division has been using a very effective strategy to point out misuses of the metric system in the print media. The daily newspapers are checked for evidence of misuse and letters, pointing out, the errors were sent to the relevant newspaper advertising agencies or directly to the clients and telephone calls were also made in this regard.

As a result, sixty eight (68) letters highlighting instances of misuse of the metric system were issued to television stations, media houses, printing agencies and other organizations interfacing with the public. A total of thirty two (32) telephone calls were made to defaulters for misusing the metric system.

In response, almost all of the stakeholders took steps to address these flaws with the exception of a few, who kept citing that their customers made requests specifically to have advertisements prepared using imperial units. This activity will continue in 2006.

6.3.8 Observations/ Comments

In the foregoing year, it was observed that generally business were willing to change over to the use of the metric system, but the consumers were the driving force behind the use of the imperial system. Hence, in the new year a consorted effort would be made to target consumers with the metric messages.

From observation, the support of the consumers would not be forthcoming unless the Omnibus Law is passed thus enforcing the use of the metric system.

6.4 INFORMATION TECHNOLOGY (IT)

Over the past year, the GNBS IT programme made steady progress. A new server and software (**Dell Power Edge 2800 and software windows 2003 server, standard edition total cost of \$1,785,856.00**) was obtained. This server was set up for use in November as a file server and performed most of the major functions of the network. The network system allowed staff to share files, folders and help them to communicate over the intranet effectively. Information technology played an integral part in the programme activities of the Bureau and helped staff to carry out their functions effectively.

6.4.1 Upgraded Internet connection

During this year, the Bureau switched over from dial-up internet connection to DSL connection. This is to facilitate staff to have faster access to the internet and the intranet. This connection is always on, which means that the internet can be accessed without the need to dial up the internet service provider over a telephone line. Information can be downloaded into computers at significantly higher speeds than with traditional modems.

High speed internet access makes data processing capabilities necessary to use the internet available via one of several high-speed transmission technologies. These data processing capabilities are "digital" in nature, meaning that they compress vast amounts of voice, video, and data information.

6.4.2 Maintenance of GNBS networks

In order to provide quality service to GNBS staff, the following activities were carried out during the year to maintain the network system:

- ❖ Production of schedule backup sheet
- ❖ Resetting IP addresses on GNBS computers.
- ❖ Clearing the automatically detect settings on server
- ❖ Running daily virus scans on server to prevent attacks by viruses.
- ❖ Backing up was done on a weekly and monthly basis.
- ❖ Downloading patches for viruses.
- ❖ Fixing exchange server for email.
- ❖ Installing new net work cards
- ❖ Upgrading the memory of various computers to suit the needs of users.
- ❖ Resetting IP addresses.
- ❖ Resetting user passwords.
- ❖ Fixing proxy server.
- ❖ Configuring email addresses for all staff.
- ❖ Deleting user accounts upon request.
- ❖ Sharing files for all staff over the network
- ❖ Troubleshooting computer network problems.
- ❖ Running Anti Spy ware software on all computers.
- ❖ Fixing DNS server
- ❖ Fixing DHCP server
- ❖ Fixing Firewall Router
- ❖ Resetting IP address on the Router
- ❖ Adding client computers to the network
- ❖ Changing DHCP IP address
- ❖ Uploading new Anti Spy ware software.
- ❖ Uploading Microsoft windows update
- ❖ Changing network cables and printer cables.

6.4.3 IT Improvement

In an effort to continuously improve the IT capability of the GNBS in order to better address the needs of its staff, actions would be taken in the new year to:

- (i) have an IT department that is capable of dealing with all IT matters. The GNBS needs a designated IT room to secure all its information and provide a better environment for the network;
- (ii) have permanent, on going support, training and maintenance (hardware, software and windows 2003 server) as the IT environment becomes more complex;
- (iii) purchase one Laser jet printer which will eliminate the use of all small printers on client computers. In this way, all departments can access one printer, therefore minimizing expenditure;

- (iv) purchase original copies of application software and operation software to upgrade client computers for staff to provide better quality work;
- (v) fix the electricity problem because of voltage fluctuation. Surge protectors would be bought to prevent damage from power spikes; and
- (vi) have more client computers.

7.0 ADMINISTRATION AND FINANCE - 2005

The Administration and Finance Department which comprises of seventeen (17) non-technical staff members, is responsible for the overall Administrative and Financial control of the Guyana National Bureau of Standards. The objective of the Department is to render effective and efficient support to the six (6) Technical Departments of the Bureau in the most cost-effective and timely manner. The Department also plays a key role in liaising with other Ministries on financial matters pertaining to the operation of the GNBS.

7.1 Administration

7.1.1 Staff Training

For the year, the Bureau participated in a number of training programmes, meetings, symposia and conferences overseas as listed below:

- (i) Ms. Candelle Walcott and Mr. Edward Melville, Coordinator and Snr. Inspector respectively, of the Laboratory Services Department, attended a Scientific Metrology training programme at the Jamaica Bureau of Standards during the period February 14 – 18, 2005. The objective of the programme was to acquire knowledge necessary on the testing abilities and to improve the calibration capabilities within the Laboratory Services Department with respect to Scientific Metrology.
- (ii) Dr. Chatterpaul Ramcharran, Director, GNBS participated in a three day workshop on WTO/SPS in Jamaica during the period February 16 – 18, 2005. The objective of the workshop was to sensitise participants about the SPS Agreement of WTO and the need to set up the infra-structure in the country to handle all SPS matters.
- (iii) Ms. Candaicy David, Technical Officer of the Standards Development Department attended the 1st Caricom Regional Organisation for Standards and Quality (CROSQ), Technical Management Committee meeting in Trinidad and Tobago on March 21 – 22, 2005. The objective of the meeting was to facilitate a better relationship among Regional Standards Bureaus, the harmonization of Technical Standards within the region and the facilitation and enhancement of inter-regional and extra regional trade.
- (iv) Mr. Shailendra Rai, and Mr. Jermaine Softley, Chief Inspector and Senior Officer, respectively, of the Standards Compliance Department participated in a four day Legal Scientific and Industrial Metrology training programme in Kingston, Jamaica during the period May 17 – 20, 2005. The programme, which was funded by the Caribbean Development Bank, exposed the Inspectors to the necessary knowledge for understanding weights and measures in commerce, utility measurements, processing, instrumentation, calibration management, Legal Metrology for the petroleum sector and chemical metrology.
- (v) Dr. Chatterpaul Ramcharran, Director attended the 33rd Session of the Codex Committee on Food Labelling in Malaysia during the period May 9 – 13, 2005.

(vi) Mr. Elton Patram, Technical Officer of the Standardisation Department attended a one (1) day Seminar at the United States Codex Office on May 15, 2005. The purpose of the Seminar was to continue the efforts to promote closer relationship between US Codex Office and other Caricom and Central American Offices.

(vii) Ms. Evadnie Ennis-Fields, Head, Information Services, and Mr. Elton Patram, Technical Officer, Standards Department, participated in the "Standard in Trade" training WTO enquiry point operation in Gaillenbey, Maryland, Campus, USA during the period June 6 – 10, 2005. The Workshop was organized to render the participants with a better understanding of the WTO Technical Barrier to Trade with a focus on the responsibilities under the WTO Agreement on Technical Barriers to Trade.

(viii) Dr. Chatterpaul Ramcharran, Executive Director, attended an Annual General meeting of the Inter American Metrology System (SIM) Symposium/Workshop during the period October 10 – 14, 2005 in Trinidad and Tobago. The meeting brought together representatives from 34 Member States of the Organization of American States, responsible for Metrology and provided a forum for the country representatives to identify problems and areas for training and capacity building.

(ix) Mr. Anthony Ross, Head, Conformity Assessment Department, attended a three (3) day workshop organized by WTO/TBT in Trinidad and Tobago during the period November 30 to December 2, 2005. The Workshop was designed to foster a better understanding of the agreement on Technical Barriers to Trade (TBT) and clarified misunderstanding of the adoption and application of Technical Regulations and Conformity Assessment Procedures.

(x) Ms. Candelle Walcott-Bostwick, Coordinator Laboratory Services Department, participated in a training programme during the period November 30 December 14, 2005 in Trinidad and Tobago. The training entitled "Strengthening of Medical Laboratory Services in the Caribbean" was conducted by the Caribbean Epidemiology Centre (CAREC). Her participation in the programme provided knowledge and experience in facilitating accreditation of medical laboratories in Guyana.

(xi) Mr. Abidin Mohamed, Technical Assistant, attended a FAO/WHO Regional Conference on Food Safety for the Americas and the Caribbean in Costa Rica during the period December 4 – 5, 2005. The objective of the conference was to enhance participation in the enhancement in CODEX activities. Further, Mr. Mohamed also attended the Regional Conference on Food Safety for the Latin Americas, from December 6-9, 2005, in San Jose, Costa Rica. The objective of the conference was to facilitate discussion on food safety issues, identifying opportunities for improving regional cooperation, promote and strengthen the establishment of regional networks amongst others.

Additionally, staff members participated in a number of local meetings, symposium/workshop to contribute towards standardization as outlined under:

(xii) Ms. Tracy Ann Seaforth, Assistant Public Relations Officer, attended a three (3) day capacity building training in 'Basic Public Awareness Techniques Development and Evaluation of professional materials' on February 16, 18 and 25, 2005. The training, organized by CPEC/CIDA in collaboration with the Ministry of Health and Agriculture, was aimed at developing the skills in mass media newspapers, Radio (TV), thus developing basic communication skills.

(xiii) Ms. Candelle Walcott, Technical Officer of the Standardisation/Laboratory Services Department conducted a sensitization session on March 10, 2005 for Laboratory Accreditation ISO/IEC 17025 standard at the Guyana Rice Development Board. The main objective for the lecture/discussion was to render assistance to operatives of Laboratories in developing administrative/management systems to support technical requirements.

(xiv) Mr. Elton Patram, Technical Officer of the Standardisation Department, attended a half day Symposium on wood presentation and seasoning on March 24, 2005. The Symposium, organized by the Guyana Forestry Commission, was held in the Conference Room of the Commission. The symposium was aimed at highlighting various ways to preserve and season wood.

(xv) Mr. Osei Drakes and Vishnu Matbadal, both Inspectors attached to the Laboratory Services Department, attended a three (3) day Rice/Paddy Grading and Warehouse Management training programme during the period June 6 – 8, 2005. The training designed by the GRDB was conducted at the Institution's Research Centre and provided participants with the theoretical and practical knowledge on the various aspect of Rice and warehouse management.

(xvi) Mr. Kevin Beepat and Mr. N. Adzal, both Inspectors assigned to GNBS Region # 6 Sub Office, completed seven weeks of practical training on August 22, 2005 at the GNBS Head Office. The training which was facilitated by the Standards Compliance Department exposed the newly-recruited Inspectors to the various aspects of the Bureau's operation.

(xvii) Mr. Abidin Mohamed, Technical Assistant, participated in a two day training session on Nutritional Labelling and Analysis Software during the period September 8 – 9, 2005. The training provided by Judith Quick and Associate, Hancock, USA for Carana Corporation under USAID on the Trade and Investment Support project was held at the Guyana Food and Drug Department and provided information to the Caricom member countries on Labelling software.

(xviii) Ms. Candaicy David, Technical Officer, attended a workshop on Enhancing the participation and effectiveness of Caricom countries in Codex Alimentarius and the Codex Committee on Residues of Veterinary Drugs in Foods. The workshop was chaired by Ms. Margaret Kallo, Senior Project Officer, Agriculture Development, Caricom Secretariat. The main objective of the workshop was to provide information to the Caricom countries on the working of the Codex Committee on Residues of Veterinary Drugs in Food.

(xix) Mr. Claude Duncan, Technical Assistant of the Standardisation Department, attended a one (1) day Seminar entitled "Faces of Disaster Mitigation: the Guyana Sea Coast Assignment" on November 17, 2005 at the Sea Breeze International Hotel. The Seminar organized by PAHO in association with the University of Guyana, examined situation/strategies to avoid risks of sea coast disaster in Guyana.

(xx) A number of in-house training sessions were conducted by senior staff of the Bureau on various topics as follows:

- ✓ "Quality Management system", conducted by Mr. Jowal Somai
- ✓ "Report writing", presented by Ms. Evadnie Fields
- ✓ "Implementation guidelines for Management practices," presented by Anthony Ross
- ✓ "Information Technology Policies", presented by Mr. Khemraj Bhoowan
- ✓ "Complaint Handling", presented by Mr. Miciah Sukhu

7.1.2 Recruitment

Three (3) Technical Officers, two (2) Technical Assistants, two (2) Inspectors, one (1) Records Clerk, two (2) Inspector Assistants and a 'Heavy Duty' Driver were employed during the period January to December 2005. A one-day induction orientation exercise was conducted where Heads of Department sensitise the new staff on the functions of each Department of the Bureau. They were also exposed to rules/regulations and conditions governing their employment.

7.1.3 Promotion

During the period covered by the report the following Officers were promoted:

Name of Officers	Previous Position	New position
Anthony Ross	Technical Officer II	Head, Conformity Assessment Department
Ramrattie Karan	Technical Officer I	Technical Officer 11
Robin Bridgemongal	Technical Officer I	Technical Officer 11
Dhanpat Ramlakhan	Inspector I	Inspector 11
Osie Drakes	Inspector I	Inspector 11
Dillon Beckles	Inspector I	Inspector 11
Vishnu Matbadal	Inspector I	Inspector 11
Tarla Parasram	Records Clerk	Typist Clerk
Edward Melville	Inspector 11	Senior Inspector
Alwin Etwah	Inspector Assistant	Inspector I
Lorenzo Gill	Inspector Assistant	Inspector I

7.1.4 Confirmation

During the year, the following employees were confirmed in the following positions after successfully completing their probationary period:

Bernadette Richards	-	Typist Clerk
Joyann Fanfair	-	Administrative Officer
Alwin Etwah	-	Inspector Assistant
Lorenzo Gill	-	Inspector Assistant
Indira Persaud	-	Records Clerk
Rudolph Blair	-	Technical Officer
Rodlyn Grant	-	Technical Officer
Claude Duncan	-	Technical Assistant
Abidin Mohamed	-	Technical Assistant
Kevin Beepat	-	Inspector
Hemraj Sanichara	-	Inspector Assistant
Abzal Nerudeen	-	Inspector

7.1.5 Staff Award

As the Organisation celebrated Quality Week and International World Standards Day, the following employees received awards in appreciation of their long and outstanding contribution to the development of the Bureau at a simple ceremony on October 14, 2005.

Shailendra Rai	10 years
Tracy Ann Seaforth	10 years
Candelle Walcott	5 years
Shune Vickerie	5 years
Edward Melville	5 years

The ceremony which was held in the Bureau's Training Room was attended by the Honorable Minister, Mr. Manzoor Nadir, Mr. Melvyn Sankies, Chairman of the National Standards Council, Council Members and other members of Staff. The Minister, in congratulating the awardees, expressed profounded congratulations on behalf of the President and urged other members of staff to be steadfast and concentrate their efforts in the development of the Bureau.

7.1.6 Resignation

During the year in review, three (3) employees resigned from their positions as follows:-

Jowala Somai, Head, Management Systems Department, with effect from July 10, 2005
Forbes Mitchell, Technical Officer I, with effect from July 24, 2005
Candaicy David, Technical Officer 1, with effect from October 31, 2005.

7.1.7 Termination

The under-mentioned employees' services were terminated during the year 2005 for breaches of the Bureau's Policy:

Colvin Bacchus
Paul Halley
Kwesie Lewis

7.1.8 Renaming of Department

The National Standards Council, at its 11th monthly meeting approved a recommendation for the renaming of the "Management Systems Department" to "Conformity Assessment Department" with effect from November 1, 2005. The renaming was necessary in keeping with the department's in-dept involvement in the process of conformity assessment and the Bureau's effort to support free trade.

7.1.9 Equipment Maintenance

During the year, four CPU's were repaired and ten serviced, while six keyboards and two computer cases were purchased. Additionally, three systems were upgraded and seven power supplies replaced. The photocopying machine was repaired and serviced whereas the fax machine was repaired and damaged parts replaced.

7.1.10 Building Maintenance

For the year 2005, a number of critical repairs were conducted to the building which included repairs to the floor and roof. Further, one concrete water trestle was constructed and one water pump installed, to service the water needs of the Bureau but more specifically, the volumetric Laboratory. The installation was necessary to facilitate a heavier flow of water to the deionizer equipment located in the laboratory.

Three (3) new air conditioning units were installed in the following offices/ laboratory:

Director's Office
Rice Laboratory
Light Mass Laboratory

7.1.11 Vehicle Maintenance

The fleet of the Bureau's Vehicle encountered various problems during the year and had to be repaired accordingly. All vehicles were serviced in a timely manner and licence and fitness were acquired where applicable.

7.1.12 Servicing Meetings

A total of 158 Technical Committees, Sub-committees, Working groups and National Standards Council meetings were held during the year. Refreshments and snacks were served accordingly.

7.1.13 Registry

For the period January to December 2005, a total of 1,671 documents were typed, 1,370 posted, 3,083 dispatched and 797 correspondences filed.

7.2 Financial review

The GNBS operates two accounts:

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

7.2.1 Government Subvention

Government Subvention received for the period January to December 2005 totalled \$66.807 M dollars, while expenses for the said period totalled \$ 66.813 M which revealed bank over draft of six (6) thousand dollars.

Table 21 shows the nine (9) major expenses for the year 2005 financed by Government Subvention.

Table 21
Major Expenses ('000)

Chart of a/c	Line Item	Amount
6111-6117	Wages & Salaries	44,788
6131-6135	Overhead Expenditure	12,216
6221-6224	Equipment & Supplies	753
6231	Fuel & Lubricants	1,649
6242-6244	Rental & Maintenance of Bld.	573
6261-6265	Transport, Travel & Postage	819
6271-6273	Utility Charges	3,228
6281-6284	Other Goods & Services	1,745
6291-6294	Other Operating Charges	450
6231-6232	contribution to organization	592
	Total	66,813

A budget of 84.5M was submitted. The organization received a budget of 66.8M which was broken down as 53.8M for salaries, 3.2M for retroactive salary(7%) and 9.8M as other charges.

7.2.2 Other Income

Other Income generated for the period January to December 2005 totalled 19M of which the entire sum was utilised to partly offset operational expenses during the year due to the unavailability of subvention funds (budget cut).

Table 22. shows Income Generated and Refunds for 2005. A breakdown in percentages is shown in Figure 7.

Table 22
Income generated

Revenue Centres	Amount
Import Monitoring Fees	2,950,500
Verification of Devices	9,866,809
Sale of Publications	761,750
GNBS/CPEC Training Programme	160,000
Rice Testing, Lab Fees & renewal of permits	1,514,470
Calibration of meters	2,466,500
Pension Refunds & Donation	1,304,923
TOTAL	19,024,952

Table 23. shows the expenses incurred from income generated.

Table 23
Expenses incurred from income generated

Expenses	Amount
Goods and Services	2,658,266
Travel Expenses & Subsistences	2,759,175
Employment Cost	616,681
Public Utility Charges, Fuel etc.	2,351,071
Purchase of Equipment	1,971,306
Maintenance of Building & Equipment	3,605,893
Purchase of Motor Vehicle	3,466,227
Maintenance of Vehicle	741,788
Council Stipend	612,500
Pension contributions (Employer)	2,477,709
Training , Symposium	967,029
Refund (Pension Contribution etc.)	768,507
TOTAL	22,996,152

A CPEC/GNBS Quality Management System training programme commenced during the previous year which was able to generate additional funds during 2005 for services provided to various companies which is indicated in the Revenue Centres.

7.2.3 Procurement

For the year the Bureau received 12M as Capital releases. This amount was utilized to purchase one 2000L Test Measure and one temperature calibration equipment.

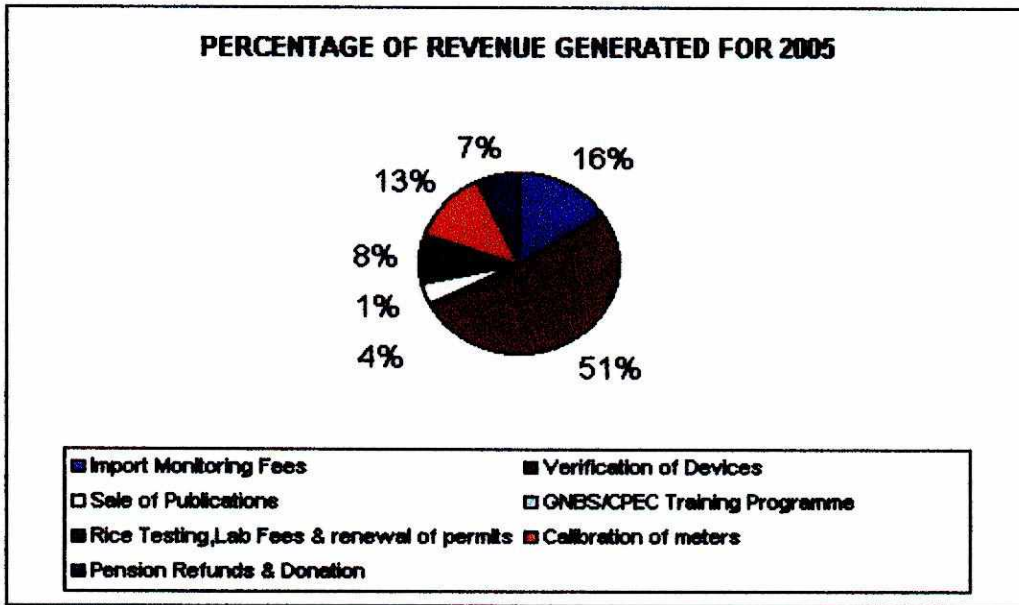
Additionally, the following was also purchased from "Other Income".

1. Vehicle – Director
2. One Dell Power edge 2500 Server with standard edition software
3. Four work stations
4. Three Air conditioning units
5. Four fans
6. Two desks
7. One moisture meter
8. Four Laboratory chairs
9. Two Executive chairs
10. One Fax machine (Region # 2)

Further, the photocopying machine that was previously being rented has been fully acquired by the Bureau for a cost of one hundred and ninety five thousand dollars (\$195,000).

One "Guyana National Bureau of Standards" sign was constructed and erected at the main entrance of the National Exhibition Complex. Also, the plaque displaying the mission and vision of the Bureau, the Pledge and National Anthem were refurbished.

Figure 7



8.0 OBSERVATIONS AND COMMENTS

8.1 Financial

The financial year 2005 was very challenging for the GNBS due to a budget cut of 21M that caused the Bureau to prioritise its activities, thus sacrificing some critical ones. Never-the-less, the Bureau was able to generate 18.2M as revenue which greatly assisted in the implementation and execution of the various work programmes. Further, the GNBS was able to purchase most importantly one server to meet the information technology needs and to better improve the Bureau Management Information Service. Additionally critical repairs were conducted and staff welfare activities were met accordingly. It is expected that in the new year more resources will be made available to the Bureau to achieve the target established as outlined in the work programmes.

8.2 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, the matter was drawn to the attention of Cabinet during the year with approval granted for the CTA and GNBS to collaborate and implement a system to deal with the quality of imports. This was a breakthrough for the GNBS and the system was effected on November 21, 2005 with the positioning of an Inspector at the CTA's entries receiving desk to screen all commercial entries, and follow-up examination of commodities at the ports-of-entry or at bonds/warehouses.

8.3 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.

The USAID -- GTIS Project was approached for funding and approval has been granted to provide two Consultants, legal and technical, to deal with the legislation in the first quarter of the new year.

8.4 Strengthening Weights and Measures Offices

Despite the commitment given by the Regional Chairmen and the Regional Executive Officers of Regions # 1,8 & 9, 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 2006 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.

8.5 Information Technology

IT has been identified as a separate objective in the Work Programme of the Information Services 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 2004. 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;
- (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.

8.6 Accreditation of GNBS System

The GNBS continued 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. The manuals have been completed and implementation commenced. This process will be taken to completion in the new year so as to achieve accreditation status.

8.7 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. 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.

8.8 Projects 2005

The GNBS was able to access funding through the GTIS project to assist with many activities for 2006. Because the GNBS is expected to be a proactive organization with regards to the promotion of standards and quality systems, access to finances is critical to the outcome of many of these activities.

The GNBS was also requested to submit a project concept paper during July 2005 to the Ministry of Foreign Affairs in relation to an environmental project. No feedback came from the Ministry as to whether the concept paper was accepted. The GNBS was further requested to submit following documents:

- (1) Logical Framework Analysis
- (2) Gant chart of project activities
- (3) Project budget
- (4) A refined project concept paper done in collaboration with EPA.

These documents were submitted.

8.9 Evaluation of the impact of GNBS Programmes

The GNBS with its six (6) 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.

8.10 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 focused on providing audit services to laboratories and industries in areas of Quality Management, Environmental Management and Laboratory Management to relevant national and international standards.

Auditors need training in other areas such as HACCP, ISO 14001, Health and Safety, and Tourism Sector in order to effectively audit organizations since combined systems may prevail at some organizations. Efforts would be made in the new year to effect the said training.

8.11 Jewellery Industry

There was some confusion existing in the Jewellery industry falling under the purview of two Agencies, the GNBS and the GGMC. This required a double registration, and a double monitoring system. The GNBS requested a meeting with the respective Ministers to deal with the matter. In June, the Prime Minister convened the meeting with the Honourable Minister and Permanent Secretary of Tourism, Industry and Commerce, Director of GNBS, Commissioner of GGMC and the General Manager of Guyana Gold Board. The matter was discussed and it was agreed that while the GNBS would continue with its standards mark scheme, the GGMC would function as the Regulatory Body for the industry. This was an unfortunate decision since the GNBS had plans to implement the two standards developed and approved in order to streamline and improve the industry. Work had, in fact, already started at the ground level to assist jewelers and goldsmiths to upgrade their operations.

8.12 Product Certification (Standards Mark)

For the client who are on the GNBS PC Scheme, all have been meeting the requirements of the relevant national standards with minor discrepancies.

On the other hand, clients who have been seeking certification have not been addressing recommendations in a timely manner, hence, they could not have joined the programme despite the level attained in the certification process. The absence of national standard for which certification requests have been received together with limited testing facilities have also posed some difficulties with the PC Scheme for the year.

8.13 Moisture meter calibration

Moisture meters are used at the various rice mills in the country, to assess the moisture content of the paddy received from farmers. The operational accuracy of these meters is critical in the purchase of paddy and the subsequent procession of the said paddy. The meters need to be calibrated periodically while this activity is currently being conducted by the National Flour Milling Company, numerous requests were received from proprietors of rice mills for the GNBS to carry out such calibration activity. This should be a responsibility of the GNBS.

The GNBS acquired a digital moisture meter and other equipment necessary for the calibration of moisture meters, and experimental work is being carried out in testing the official methods. The GNBS would commence the calibration of moisture meters and offer this vital service to the rice industry early in the new year.

8.14 Verification of electricity meters

The six-station, single phase electricity meter test bench acquired by the GNBS can only verify meters of 240V. There is need for the GNBS to have a test bench which could handle meters of 110V. The possibility to convert the same test bench to handle meters of both voltages has been exploited without success. This venture would continue early in the new year, failing which, the GNBS would need to purchase another test bench. This is critical since the new meters submitted by GPL for verification during 2005 were found to be out of calibration to the extent of about 24%. These meters had to be calibrated and retested by the GNBS before release to GPL.

8.15 Rice certification

The certification of rice by GNBS to facilitate exports to Jamaica spreads over three (3) Departments, viz., Standards Compliance (taking samples from the mills and ports-of-exit), Laboratory Services (testing of samples collected), and the Conformity Assessment Department (issuing certificates for each shipment). This certification activity is carried out on behalf of the GRDB and the Jamaica Bureau of Standards (JBS).

The activity is very laborious, time-consuming, uneconomical, which adversely affects the work programme of the Standards Compliance and the Laboratory Services Departments. Accordingly, the GNBS is moving to have the laboratory of GRDB certified to the National Laboratory Standard, after which, the said laboratory would carry out certification of the rice. GRDB already developed its policy manual and procedural manuals, and have started implementation of same. An audit would be conducted during the first quarter of 2006. The JBS has no objection to this approach, but indicated that the GRDB's quality system in place would need to be examined by their auditors.

8.16 Certification of medical laboratories

Under the Laboratory Certification Programme, GNBS includes medical laboratories from the public and private sectors. This programme started some five years ago in agreement with the Ministry of Health. Only six (6) laboratories have been certified, with two (2) currently maintaining certification. The host of other medical laboratories are extremely slow in responding to the requirements of certification, and no commitment was expressed or displayed to have the work done to facilitate certification.

This activity does not fall within the main stream activities of the GNBS, and the Management Team is mulling on the idea to have it transferred to the Ministry of Health which now operates a Laboratory Standards Department and which would be responsible for the enforcement of the new hospital legislation. This matter would be reviewed at the first review meeting in the new year.

9.0 PROJECTIONS

A strategic plan for the GNBS has been designed by the staff and the governing National Standards Council covering the years 2006-2010. The strategic element of the plan have been developed into the various work programmes for 2006, the activities of which would facilitate significant achievements of the mission statement. While certain routine activities would continue in providing vital, essential and necessary services to the different stakeholders, the GNBS would launch new initiatives and other innovative activities in order to consolidate its effort to promote standards and quality systems in Guyana. Projections in the new year would include the following:

- (1) With the acquisition of a 2000L test measure, the GNBS would enhance its capability to verify large capacity meters and wagon compartments used in the petroleum sector.
- (2) The scientific monitoring of the net contents of prepackaged commodities would commence in the new year.
- (3) The monitoring of quality of imports would be aggressively intensified with the new control system being instituted and managed by the Customs and Trade Administration and GNBS.
- (4) In the construction industry, technical assistance would be provided to concrete block makers to improve the quality of their blocks in accordance with the requirements of the national standard.

- (5) The National Standards Act of 1984 and the Weights and Measures Act of 1981 would be updated and Regulations would be developed to give effect to these Acts.
- (6) GNBS would use a more aggressive approach to drive the public sector Inspection, Testing and Certification Agencies to become accredited to their respective international standards.
- (7) Greater technical assistance would be provided to companies (at least 10) in the implementation of ISO 9001, ISO 14001, and GYS 231 standards. A series of awareness sessions would be conducted with top managers on these standards on an individual company basis.
- (8) A series of USAID-GTIS Projects (6) would be executed and managed to enhance the capacity of the GNBS in standardization, conformity assessment and metrology (legal & scientific). Also, an IDB/CROSQ Project would also be executed to support the development and competitiveness of small and medium sized enterprises.
- (9) GNBS would provide a calibration service of moisture meters to the rice industry.
- (10) Efforts would be initiated to have a new, purpose – built building to house the GNBS. An entry was made in the capital budget for the new building.
- (11) The GNBS would have its operating systems certified to the ISO 9001 international standard. Also, its inspection, testing and certification systems would be accredited to the respective international standards.
- (12) The calibration activities would be expanded to include temperature, pressure and electrical/electronic. The equipment for temperature and pressure have already been purchased. This service would be provided to various industries, laboratories and other institutions.
- (13) The certification of rice to Jamaica would be discontinued by the GNBS after the laboratory of GRDB is certified and an inspection is carried out by Jamaica Bureau of Standards.
- (14) The Weights and Measures Offices would be established in Regions 1,8 & 9 and Officers trained to manage the activities (weights and measures and metrication) of the said Offices.
- (15) GNBS would continue its “outreach” programme with the Amerindian communities in the various Regions of Guyana providing assistance and support in several areas including weights & measures, metrication and standards and quality.

APPENDIX 1
LIST OF MANUFACTURERS REGISTERED FOR 2005.

MANUFACTURERS	COMMODITIES
Gafsons Industries Ltd.	PVC pipes and Furniture
A H & L Kissoon Ltd.	Furniture
Torginol Paints Ltd.	Paints
Guyana Stockfeeds Inc.	Animal feeds
Lall's Garment Enterprise	Garments
Denmor Garments Manufacturers Inc.	Garments
Edun's Poultry and Hatchery	Animal feeds
Dence Poultry Supplies	Animal feeds
Quicks International Concrete Works	Concrete blocks
Shivrani and Kevin Block Centre	Concrete blocks
Fariad Singh	Concrete blocks
Muntaz Hollow Block Service	Concrete blocks
Ramson's Enterprise	Concrete blocks
Rawle Tulloch	Concrete blocks

APPENDIX II
TECHNICAL COMMITTEES OF THE
GUYANA NATIONAL BUREAU OF STANDARDS

Standards are formulated by the work of technical committees comprising persons from various interest such as producers, consumers, technologists and professionals from both private and public sectors. This type of partnership allows for transparency, openness and consensus to be achieved in the development of the standard. This approach, although time consuming, allows for adopted standards to be more readily accepted by all parties.

The following Technical Committees currently operate under the auspices of the Bureau:

Technical Committees in Operation

Technical Committees (TC) Number	Technical Committee
TC 1	Agriculture
TC 2	Foods
TC 3	Chemical
TC 4	Electrotechnical engineering
TC 6	Mechanical engineering
TC 9	Laboratory management
TC 10	Civil engineering
TC 12	Tourism
TC 13	Wood products
TC 14	Environment

APPENDIX III

Standards Development Process

Guyana's standards are developed in accordance with the WTO's Code of Good Practice for the Preparation, Adoption and Application of standards. The following outlines the process undertaken:

The preparation of standards is undertaken upon the Standards Council's authorization. Recommendations are made to the Council based on requests from National Organisations, the general public, existing Technical Committees, or Bureau staff.

If the project is approved, it is referred to the appropriate Technical Committees, or the project is assigned to the Bureau staff. In the absence of an appropriate Technical Committee, if deemed necessary, a new Technical Committee is formed. A Technical Committee comprises of experts and stakeholders in the relevant field and a Bureau staff member serves as Secretary.

The draft document is then made available for general public comments. All interested parties, by means of a notice in the press, are invited to comment within a sixty (60) day period. In addition, copies are forwarded to those known to be interested in the subject.

The Technical Committee considers all the comments received and amends the draft accordingly. The final draft is then recommended to Council. On Council's approval, notice of the standard is published in the local newspapers, and copies are placed for sale.

If compliance with the standard is deemed necessary for the health and safety of consumers, Council may recommend to the Minister to declare the standard compulsory. If necessary, the Minister may seek to obtain the formal concurrence of any other Minister and Sector who may be responsible for any area which the standard may affect. The compulsory standard is then sent to the Attorney General's Office for vetting and final review to ensure compliance with current legislation.

A national standard is reviewed and updated every five years in an effort to reflect the latest developments in safety and technology, as well as current realities in the marketplace and consumer demands.

Amendments to, and revisions of standards formally require the same procedure as is applied to the preparation of the original standard.

APPENDIX IV
Standards approved by National Standards Council for 2005

Standards developed

1. Interim guidelines for industrial air emission into the environment.
2. Methods of sampling and testing for water and wastewater – Part 6: Dissolved oxygen.
3. Code of Practice for the production, processing, labelling and marketing of organically produced foods.
4. Code of Practice for the cultivation of paddy.
5. Specification for the labelling of helmets.
6. Interim guidelines for noise emission into the environment.
7. Method of sampling and testing for water and wastewater – Part 23 – Nickel.
8. Method of sampling and testing for water and wastewater – Part 22 – Zinc.
9. Specification for labelling of planting material – Part 1: seeds.
10. Code of Practice for the hygienic production of fresh fruits and vegetables.
11. Code of Practice for poultry processing.
12. Guide for drafting and presentation of Guyana standards.
13. Specification for the storage, handling and transportation of LPG cylinders.

Standards revised

1. Specification for poultry feed.
2. Specification for labelling of household electrical appliances.
3. Code of Practice for the manufacture of furniture.
4. Specification for pineapples.
5. Specification for mangoes.
6. Code of Practice for buildings – Part 3: Fire Safety Use and Occupancy.
7. Code of Practice for buildings – Part 1: Enforcement.
8. Code of Practice for buildings – Part 13 : Foundations and Excavations.
9. General requirements for the competence of testing and calibration laboratories.

FORM EX-1PB: CURRENT EXPENDITURE ST											
MONTHLY EXPENDITURE STATEMENT											
For Period Endind: December, 2005											
D											
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. Prev. Mth Curr. Mth Total Exp. to date liabilities o/s-mth end YTD Exp & liab. Bal. on Releases Bal. on Voted Prov.											
Releases											
Total Statutory Expenses											
Total Statutory Emp. Expenditure											
011 Statutory Wages And Salaries											
012 Statutory Benefits And Allowance											
013 Statutory Pensions And Gratuities											
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											
Total Employment Costs 63,666 58,661 6,011 63,662 - 60,434 (6)											
Total Wages and Salaries 32,457 49,669 4,784 63,863 - 63,863 (1,396)											
6111 Administrative 39,761 38,033 3,604 41,637 - 41,637 (1,876)											
6112 Senior Technical 5,578 5,265 484 5,749 - 5,749 (171)											
6113 Other Technical & Craft Skilled 2,871 2,762 237 2,999 - 2,999 (128)											
6114 Clerical And Office Support 18,703 17,590 1,710 19,300 - 19,300 (597)											
6115 S/Skilled Operatives & Unskilled 6,243 6,128 581 6,709 - 6,709 (465)											
6116 Contracted Employees 2,582 2,503 248 2,751 - 2,751 (169)											
6117 Temporary Employees 3,784 3,785 344 4,129 - 4,129 (345)											
OVERHEAD EXPENDITURE											
6131 Other Direct Labour Cost 12,696 11,636 680 12,216 - 12,216 480											
6132 Incentives 195 142 12 154 - 154 41											
6133 Benefits And Allowances 8,229 7,839 387 8,226 - 8,226 3											
6134 National Insurance 2,794 2,336 243 2,584 - 2,584 210											
6135 Pensions 1,478 1,219 33 1,252 - 1,252 226											
Chart of Accounts & Line Item											
Y.T.D. Exp. Prev. Mth Curr. Mth Total Exp. to date liabilities o/s-mth end YTD Exp & liab. Bal. on Releases Bal. on Voted Prov.											
Releases											

TOTAL OTHER CHARGES		11,199	9,082	727	9,809	-	6,681	1,390	
Expenses Specific to the Agency									
111 Expenses Specific to the Agency									
Materials, Equipment and Supplies		448	753	-	753	-	753	(305)	
6221 Drugs and Medical Supplies		10	-	-	-	-	-	10	
6222 Field Materials And Supplies		30	-	-	-	-	-	30	
6223 Office Material And Supplies		220	613	-	613	-	613	(393)	
6224 Print And Non - Print Materials		188	140	-	140	-	140	48	
Fuel and Lubricants		2,670	1,514	135	1,649	-	1,649	1,021	
6231 Fuel And Lubricants		2,670	1,514	135	1,649	-	1,649	1,021	
Rental and Maintenance of Buildings		636	573	-	573	-	573	62	
6242 Rental of Buildings		545	-	-	-	-	-	545	
6243 Maintenance of Buildings		50	570	-	570	-	570	(520)	
6244 Janitorial And Cleaning Supplies		40	3	-	3	-	3	37	
Maintenance of Infrastructure									
6251 Maintenance of Roads									
6252 Maintenance of Bridges									
6253 Maintenance of Drainage & Irrigation Works									
6254 Maintenance of Sea & River Defences									
6255 Maintenance of Other Infrastructure									
Transport, Travel and Postage		977	819	-	819	-	819	158	
6261 Local Travel & Subsistence		200	356	-	356	-	356	(156)	
6262 Overseas Conference & Official Visits									
6263 Postage, Telex And Cablegram		11	31	-	31	-	31	(20)	
6284 Vehicle Spares And Services		766	432	-	432	-	432	334	
6265 Other Transport, Travel & Postage		-	-	-	-	-	-	-	
Utility Charges		3,825	3,228	-	3,228	-	3,228	597	
6271 Telephone Charges		860	769	-	769	-	769	91	

6272	Electricity Charges	2,950	2,459	2,459	-	2,459	491	
6273	Water Charges	15			-		15	
	Other Goods and Services Purchased	1,800	1,745		1,745		1,745	55
6281	Security Services	150	-	-	-	-	150	
6282	Equipment Maintenance	420	332	332	-	332	88	
6283	Cleaning & Extermination Services	20	156	156	-	156	(136)	
6284	Others	1,210	1,257	1,257	-	1,257	(47)	
	Other Operating Expenses	244	450		450		450	(206)
6291	National And Other Events		6	6	-	6	44	
6292	Dietary	50			-		-	
6293	Refreshments	40	106	106	-	106	(66)	
6294	Others	154	338	338	-	338	(184)	
	Education, Subventions and Training	-	-		-		-	
6311	Education Subventions & Grants	-	-	-	-	-	-	
6312	Training (including scholarship)	-	-	-	-	-	-	
	Rates and Taxes and Subventions							
6321	Rates And Taxes							
6322	Subventions To Local Authorities							
	Subs & Contri: to Local & Infr Orgs.	600	-	592	592	-	592	8
6331	Local Organisation	-	-	-	-	-	-	
6332	International Organisations	600		592	592		592	8
	Refunds of Revenue							
6341	Refund of Revenue							
	Pensions							
6351	Non-Pensionable Employees							
6352	Pension Increase							
6353	Old Age Pensions & Social Assistance							
6361	Other Public Debt (Appropriation)							
	<i>Carla M. Sklar</i>							
	ACCOUNTING OFFICER				DATE	2006-07-03		