



ANNUAL REPORT

2014

**MEDICAL BUREAU OF
ROAD SAFETY**

CONTENTS

Director's Introduction	3
Mission	4
Functions of the Medical Bureau of Road Safety	4
Significant Issues	6
Specimens Received for Analysis	7
Blood and Urine Alcohol Programme	7
Blood and Urine Drug Programme	12
Breath Alcohol Programme	18
Professional Witness	21
Quality Assurance	22
Financial Information	22
Corporate Governance	22
Freedom of Information	26
Staffing	26
Conferences, Training & Seminar Presentations	28
Energy Consumption	32
Legal Disclaimer	32



Director's Introduction

I am pleased to write this introduction to the Medical Bureau of Road Safety's Annual Report for 2014 highlighting some of the developments for the year. This report sets out a summary of the activities and performance of the Bureau and its essential role in the Government's Road Safety Strategy.

The Road Traffic Act 2014 allowed for the taking of blood specimens from incapacitated drivers and the Bureau was instrumental with other Bodies in issuing guidelines for Doctors, Nurses and Gardai for the taking of samples. This provision came into force in November 2014.

Also implemented in November 2014 was the Roadside intoxicant impairment testing of drivers which had also been provided for in the Act of 2014. The Bureau together with its partners in the School of Medicine at University College Dublin and An Garda Síochána has trained the Garda trainers by way of a post graduate certified training course and they in turn have trained the Garda members to carry out this roadside impairment testing commencing November 2014.

The Bureau continued to play a leading and integrated role with the Department of Transport, Tourism and Sport and An Garda Síochána in relation to the introduction and implementation of roadside chemical testing for drugs. A detailed scientific assessment of roadside devices, of ancillary laboratory method development and validation suitable for this purpose have been ongoing following the open tendering process published in August 2014. These will continue into 2015 when further legislative provisions are anticipated.

Work continued throughout 2014 on a new preliminary drug test which will broaden the type and number of impairing drugs for which the Bureau can test. The Bureau also expanded the number of confirmatory analyses carried out and the test method for benzodiazepines in blood was validated by the end of 2014 to be ready for operational use in 2015. This means that the Bureau now conducts almost 90% of the confirmatory analysis at its UCD campus premises.

Preparations for the replacement of existing roadside preliminary breath testing devices were commenced and this programme will be a major undertaking for the Bureau in 2015 and into 2016.

The Bureau continued to provide operator and supervisor training courses in conjunction with An Garda Síochána for the 86 Evidenzer IRL instruments in Garda stations and 14 such courses were held during 2014.

In 2014 the total number of specimens received and analysed for alcohol in blood, urine and breath and drugs in blood and urine totaled 9,358.

The Bureau continues to work together with Government departments and public authorities and also with road using public to fulfill its responsibilities under the Road Traffic Acts and also to fulfill its role as a lead or support agency in the Government's Road Safety Strategy.

***Professor Denis A. Cusack,
Director.***



Mission

The Mission of the Medical Bureau of Road Safety is to provide a high quality national forensic service in alcohol/drug (intoxicant) detection in support of the effective operation of the road traffic legislation.

Functions of the Medical Bureau of Road Safety

The responsibility for chemical testing of intoxicants in driving in Ireland rests with the Medical Bureau of Road Safety, which is a corporate body established in November 1968 by the Minister for Local Government under Part V of the Road Traffic Act, 1968. The Minister's title was altered to Minister for the Environment & Local Government 22nd July 1997. In June 2002 the Medical Bureau of Road Safety came under the aegis of the Minister for Transport under the Transfer of Departmental Administration and Ministerial Functions Order 2002.

The functions of the Bureau are laid down in the Road Traffic Acts 1968 –2010 and their regulations and they include:

- The receipt and analysis for intoxicants of specimens of blood and urine forwarded to the Bureau.
- The issue of certificates of analysis.
- The provision of equipment for the taking or provision of specimens of blood and urine.
- Approval, supply and testing of equipment or apparatus for indicating the presence of alcohol in the breath.
- Approval, supply and testing of equipment or apparatus for determining the concentration of alcohol in the breath.
- Research on drinking and drugs in relation to driving, including the methods of determining the amount of alcohol or drugs in a person's body and the epidemiology of driving under the influence of intoxicants.

When the Bureau was established in 1968 it commenced operating for Roadside Alcohol Testing, Blood and Urine Alcohol Analysis, the Issue of Certificates and provision of equipment for the taking of specimens (Kits). Since then there have been several legislative changes such as the introduction of evidential breath alcohol testing, and driving under the influence of drugs (DUID), specimens provided in hospitals, specimens taken from drivers involved in collisions and mandatory alcohol testing. The Bureau has had to expand and develop all aspects of its work while focussing on its legal responsibilities as set out in the Road Traffic Acts (RTA) and in accordance with the Government's Road Safety Strategy. Currently the Bureau has several programmes



and services in operation and these are: Blood and Urine Alcohol Analysis; Breath Alcohol Analysis; Blood and Urine Drug Analysis; Research – Driving under the influence of Intoxicants; Professional Expert Witness; Corporate/Financial and Quality Assurance.

The Director is responsible for the day to day running of the Bureau. The Chief Analyst, Ms. H. Kearns is responsible for the day to day running of the laboratories and their programmes and the Senior Administrator, Ms. T. Clarke is responsible for the Corporate /Financial programme and for overall administration within the Bureau. Each programme has a programme manager who is a Principal Analyst. The Bureau has an appointed Quality Manager. (see organisational chart).

The Bureau operates in and is dependent on a knowledge based environment and has always strived to keep up to date with technology and use the best methods of analysis. It has kept abreast of innovation in instrumentation both in the field of alcohol and drug detection, issuing suitable instruments for evidential breath testing in selected Garda Stations and suitable devices for roadside breath alcohol testing.

Since the establishment of the Bureau it has built up a reputation of the highest forensic integrity and has been able to impart over forty years of knowledge and experience to its staff, clients, and other relevant parties by means of education, training and advices. One of the major contributing factors to the operation of the Bureau is the skilled members of staff employed in the Bureau.

The Bureau provides a service to, the Department of Transport, Tourism and Sport, the Courts, the Garda Síochána, both defense and prosecution lawyers and the public.



Significant Issues during 2014

Quality Assurance

ISO 17025 accreditation was maintained in 2014 for the following tests.

- Blood and Urine Alcohol Analysis
- Evidential Breath Testing
- Preliminary Breath Testing
- Preliminary Drug Testing
- Cannabis in Blood and Urine
- Benzodiazepine in Urine

Road Safety Strategy 2013 - 2020

Progress in of areas of responsibility within the Government's Road Safety Strategy.

Preliminary Breath Alcohol Testing

The Bureau continued to support in excess of 1,000 Draeger 6510 devices provided to the Gardaí throughout 2014.

Evidential Breath Alcohol Testing

The Bureau continued to support the new generation of instruments in the Garda Stations nationwide and provided new training courses for Operators and Supervisors.

Roadside Chemical Drug Testing

The Bureau published the tender for Roadside Chemical Drug Testing devices and commenced assessment of the tender applications. The Implementation group continued communications throughout the year. The scientific evaluation commenced in 2014 and adhered to the planned timeframe.

Preliminary Drug Testing

The Bureau continued to develop a new preliminary drug testing method using LC-MS-MS for the analysis of drugs tested by the existing system as well as additional classes.

Oral Fluid

The Bureau established an oral fluid testing laboratory and developed and validated a GC-MS-MS and LC-MS-MS methods for the analysis of THC (Cannabis), Cocaine, Opiates and Benzodiazepines in oral fluid as part of the preparations for the evaluation of the Roadside Chemical Drug Testing systems.



Specimens Received for Analysis

In 2014 a total of 8,200 blood, urine and breath specimens were analysed for alcohol concentration. There was a decrease in the number of blood and urine specimens analysed during 2014. Including breath specimens' numbers there was an overall decrease of 5.8% on the total number of specimens analysed during 2013. 1,158 were analysed for the presence of drugs and this represents a decrease of 6.9% on 2013.

Table 1

Total Number of Specimens Received within Programmes

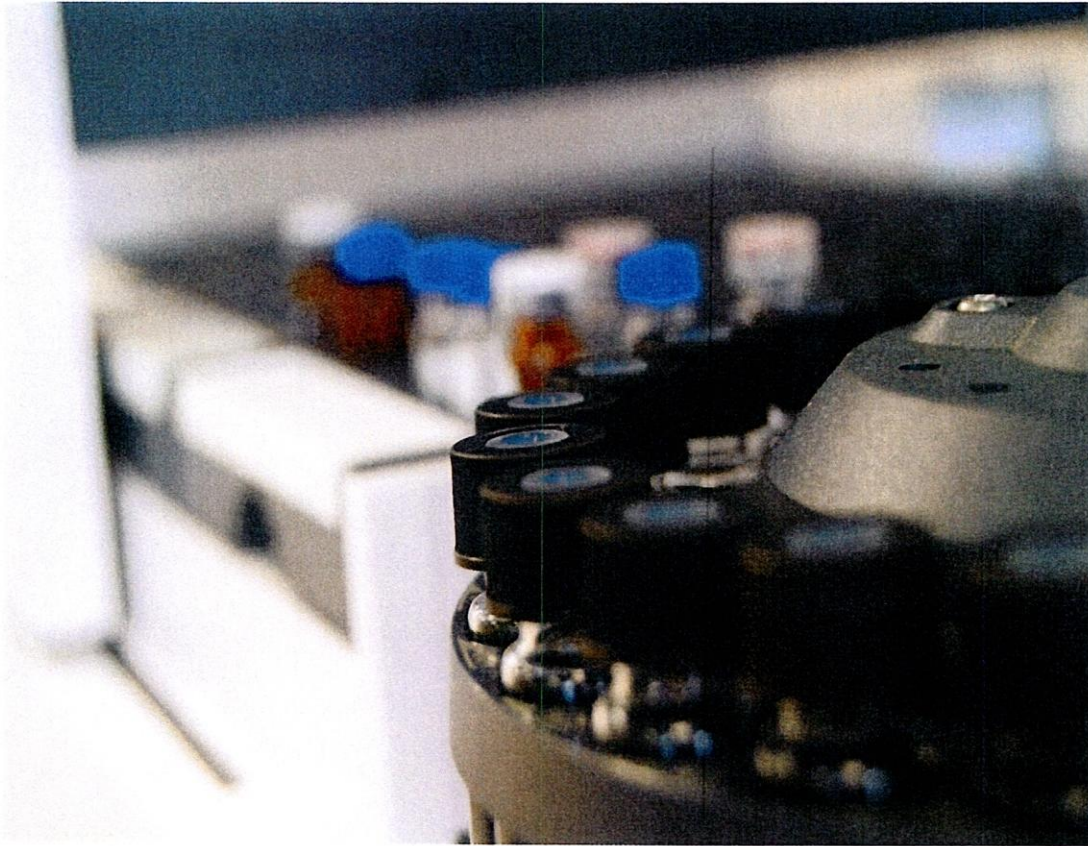
Programme	2014	2013
Alcohol Blood & Urine	2,934	3,310
Toxicology Blood & Urine	1,158	1,238
Evidential Breath Testing	5,266	4,991

Blood and Urine Alcohol Programme

This section was headed by the Principal Analyst, Ms. H. Kearns (Chief Analyst since September 2014). The main functions of this programme are:

- The receipt and analysis of specimens of blood and urine forwarded to the Bureau
- The determination, in respect of such specimens of the concentration of alcohol in the blood and urine
- The issue of certificates of analysis
- The provision of equipment (Kits) for the taking of such specimens
- The testing of spurious specimens
- Provision of expert assistance to the Courts and the DTTAS
- Collection and analysis of data in relation to alcohol tests





Provision of Blood and Urine kits

The Bureau continued to prepare kits for the provision of specimens and produced 1,700 blood kits and 2,200 urine kits in 2014. 2,000 jugs were prepared. Kits were issued to An Garda Síochána as required (5,500 Kits were issued).

Blood and Urine Alcohol Analysis

Blood and urine specimens are analysed using Headspace Gas Chromatography with Flame Ionisation Detection (HSGC-FID). Each specimen is analysed at least twice by two different scientists using two different HSGC-FID systems. The results of analyses must concur before issue of a Certificate of Analysis.

A total of 2,934 blood and urine specimens were received for analysis during 2014. Analyses were carried out and certificates were issued in 2,858 of these cases. In 76 (2.6%) cases certificates were not issued either because of some defect in the specimen or in the documentation accompanying it. This is an improvement on the 2013 non-reported rate of 3.5%. The number of blood and urine specimens received in 2014 shows a decrease of 11% on the number received during 2013.

Number of Specimens Provided in Hospitals

In 2014 there were 481 specimens provided in hospitals, this represents 16.4 % of total Blood and Urine specimens. 17.9% of these had alcohol concentrations in excess of 150mg/100ml blood and 2.9% had alcohol concentrations in excess of 200mg/100ml urine. 6.7% were in excess of 200mg/100ml blood and 0.6% were in excess of 267mg/100ml urine.

Mean Alcohol Level in Blood and Urine

The mean alcohol level in blood was 104mg/100ml and urine was 123mg/100ml for 2014, compared to the mean alcohol level in blood of 120mg/100ml and in urine 137mg/100ml for 2013.

Analysis of Time

Of the total number of blood and urine specimens received 66.3% were provided between the hours of 9.00 p.m. and 6.00 a.m., 16% between 4.00 p.m. and 9.00 p.m., and the remaining 17.3% between 6.00 a.m. and 4.00 p.m. This follows a similar pattern to 2013 and 2012.

Twice Over the Limit of 50mg/100ml (Blood) or 67mg/100ml (Urine)

During 2014 there were 1,505 specimens certified which were twice or more over these limits. This figure represents 52.7% of the total number of specimens certified.

Gender in Blood and Urine Specimens

A similar pattern was seen in the male/female ratio in 2014 compared to 2013.

Table 2
GENDER OF SPECIMENS – Blood and Urine Alcohol Analysis

Gender	2014		2013	
	No	(%)	No	(%)
Male	2,377	81.0%	2,665	80.5%
Female	521	17.8%	606	18.3%
Not Stated	36	1.2%	39	1.2%



Table 3
Age Profile of Specimens - Blood and Urine Alcohol Analysis

Age Profile	2014		2013	
	No	(%)	No	(%)
≤ 24	710	24.2%	844	25.5%
25 – 44	1,424	48.5%	1,557	47.0%
45 – 54	361	12.3%	454	13.7%
≥55	412	14.0%	428	13.0%
Not Stated	27	0.9%	27	0.8%

TABLE 4
Certified Blood Alcohol Level – Comparison with previous year

Mg. of Alcohol per 100ml of Blood	2014		2013	
	No	(%)	No	(%)
0 – 20	499	29.6%	465	25.3%
21 – 50	90	5.3%	83	4.5%
51 – 80	99	5.9%	124	6.7%
0 - 80	688		672	
81 - 100	105	6.2%	96	5.2%
101 - 150	300	17.8%	315	17.2%
151 - 200	362	21.4%	342	18.6%
201 & Over	231	13.7%	414	22.5%

TABLE 5
Certified Urine Alcohol Level – Comparison with previous year

Mg. of Alcohol per 100ml of Urine	2014		2013	
	No	(%)	No	(%)
0 – 27	380	30.5%	378	27.9%
28 – 67	80	6.4%	87	6.4%
68 - 107	99	7.9%	107	7.9%
0 - 107	559		572	
108 – 135	89	7.1%	93	6.9%
136 - 200	249	20.0%	233	17.2%
201 – 267	256	20.5%	281	20.7%
268 & Over	93	7.5%	177	13.0%

Blood and Urine Drug Programme

This programme is headed by Principal Analyst, Dr. R. Maguire. The main functions of this programme are:

- The receipt and analysis of specimens of blood and urine forwarded to the Bureau where an EBT statement for breath alcohol content has already been issued. The determination, in respect of such specimens of the presence (if any) of a drug or drugs in the blood or urine
- The issue of certificates of analysis
- Provision of expert assistance to the Courts and DTTAS
- Collection and analysis of data in relation to toxicology tests
- Roadside drug testing development
- Development of new methods of Drug Testing



Preliminary Analysis

The Bureau analyses all blood and urine specimens, found under a limit for alcohol, for the presence of seven different classes of drug or drugs. The Gardaí can also request drug analysis on specimens with alcohol levels above this limit and also for specimens where an EBT statement for breath alcohol content has already been issued. The

number of 2014 specimens analysed for the presence of drug or drugs was 1,158 with a further 9 being insufficient for preliminary drug analysis.

The MBRS continued to test specimens below 80mg/100ml in blood and 107mg/100ml in urine. 1,146 fell into this category and 11 were above this and were subsequently tested following a requests made by An Garda Síochána. There was one specimen that had been tested for alcohol using EBT submitted directly for drug testing in 2014. Of the 1,158 specimens tested 695 (58%) were found to be positive for at least one drug class on preliminary drug testing, while 445 (42%) were negative for drugs. 18 were insufficient for complete analysis.

The preliminary test involved an immunoassay which is a test that can detect the presence of a drug in a biological fluid through the use of specific antibodies. This is achieved in the Bureau by analysts through the use of commercially available kits.

Work was ongoing throughout 2014 on a new preliminary drug test which will broaden the type and number of impairing drugs for which the MBRS can test.



Confirmatory Analysis

The Bureau carries out confirmatory testing for the presence of Cannabinoids in blood and urine specimens and for the presence of the Benzodiazepine drug class in urine specimens at the Bureau's premises in UCD.

The Bureau uses either Gas Chromatography with Mass Spectrometry or Liquid Chromatography with Tandem Mass Spectrometry in its confirmatory analysis of drugs. These techniques allow the unequivocal determination of drugs in biological fluids. Whilst the Bureau conducts the majority of the confirmatory analysis at the UCD campus (80%) it has also arranged that a portion of the testing is carried out by the LGC (20%) in the UK. The following table outlines the number and type of confirmatory tests conducted at the Bureau premises in UCD and the number and type of test conducted by the LGC in the UK.

Table 6

Summary of confirmatory Testing

Drug Class	No. of tests	No. of Analytes	Conducted	%
Cannabis	497	2	MBRS	70
Benzodiazepines Urine	71	27	MBRS	10
Benzodiazepines Blood	55	25	LGC	7.8
Opiates	41	4	LGC	5.8
Cocaine	19	3	LGC	2.6
Methadone	12	2	LGC	1.6
Amphetamine	8	2	LGC	1.1
Methamphetamine	6	2	LGC	1.1
Total	709	42*		

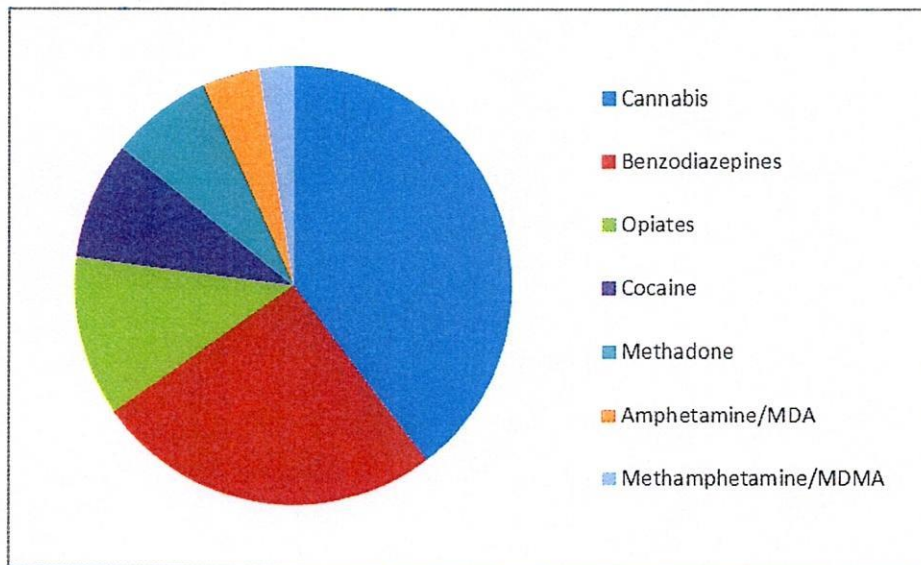
*Analytes for Benzodiazepines are only counted once in calculating this total

As can be seen the most outsourced test was for benzodiazepines in blood and this test method was validated towards the end of 2014 to be ready for operational use at the MBRS UCD campus at the beginning of 2015.

Drug Analysis Results

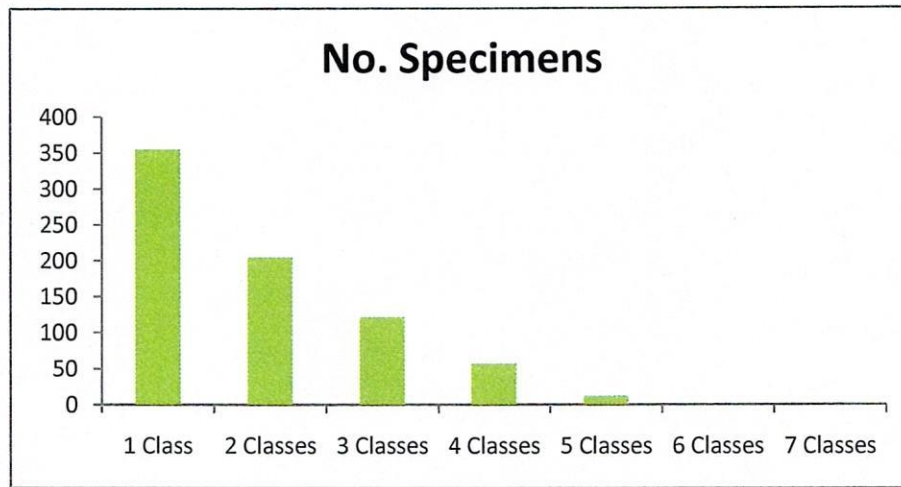
The results where drugs were detected by the preliminary drug test are shown in the chart below. As can be seen Cannabis is the most prevalent followed by Benzodiazepines as previously reported.

Prevalence of Drug Classes based on preliminary Drug Testing



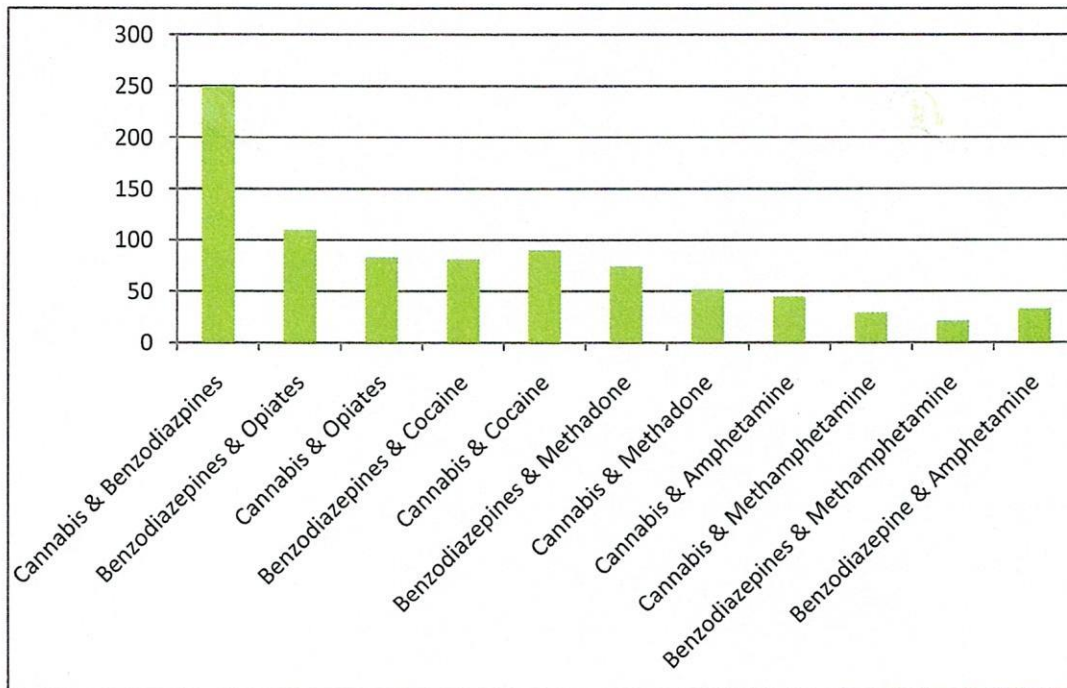
Detection of multiple impairing drugs in the same specimen taken from drivers, which was previously reported, was also observed based on preliminary drug analysis data. In all, 53% of specimens which were positive in preliminary drug testing were positive for two or more drug classes. The following chart highlights the extent of this problem.

Prevalence of Multiple Drugs use based on Preliminary Drug Testing



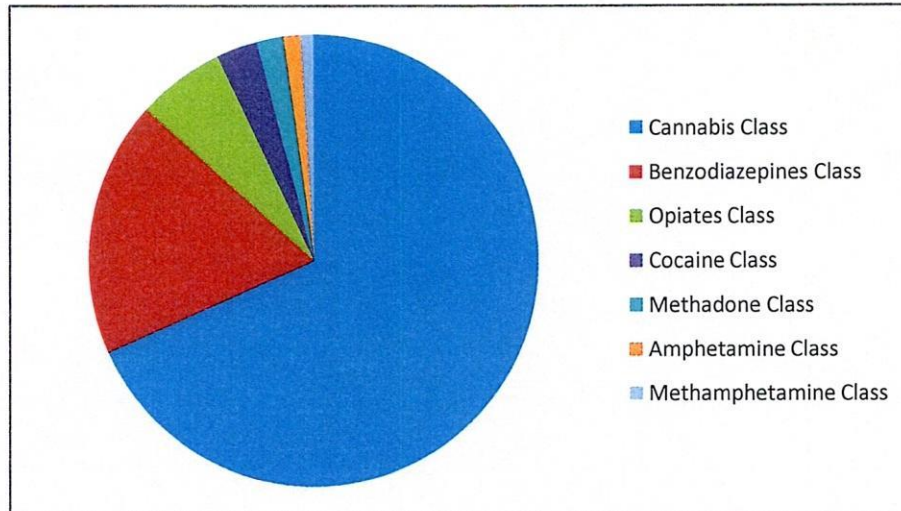
The most commonly encountered combinations are charted below in order.

Prevalence of Drug Combination Encountered based on Preliminary Drug Testing



In the case of each specimen, one drug class was selected for confirmation and the chart below shows the distribution of the drug classes for confirmatory analysis.

Prevalence of Drug Classes based on Confirmatory Testing



Roadside Chemical Drug Testing

In 2014 the Roadside Chemical Drug Testing Implementation group continued to meet. Representatives from An Garda Síochána National Traffic Bureau, the DTTAS and the MBRS form the group.

Research

Drugs and driving (DUID) continues to be an area of concern to the Government especially with regard to enforcement. The whole area of roadside drug screening will be a challenge for the Bureau.

Due to the changing nature of drug misuse there is an ongoing need to monitor the drugs being misused by drivers. The MBRS is actively developing new methods which are aimed at increasing the type and number of impairing drugs that can be detected and also improving existing methods in order to ensure that methods keep pace with advances in drug detection.

Breath Alcohol Programme

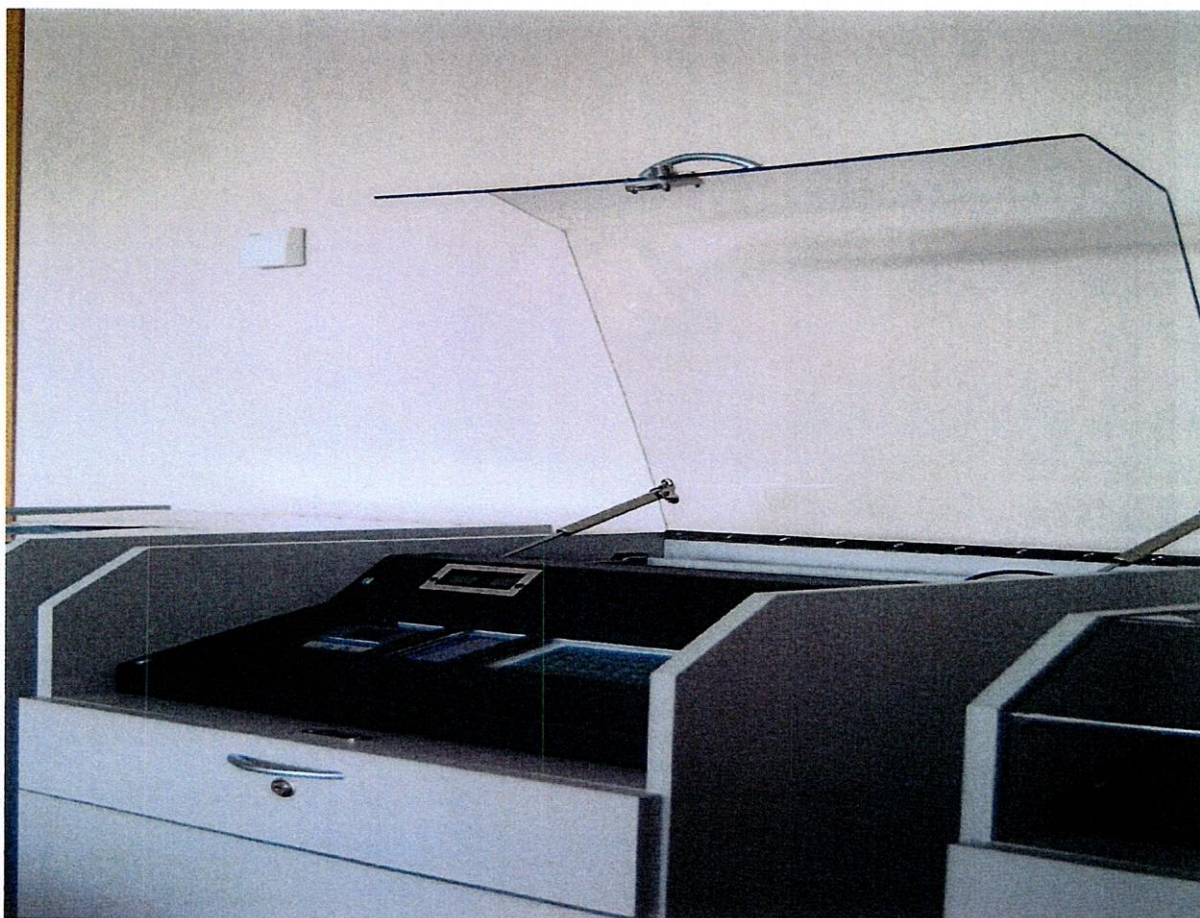
This programme is headed by Principal Analyst, Mr. D. Reynolds. The main functions associated with this programme are:

- The approval, supply and testing of apparatus for indicating the presence of alcohol in the breath (roadside breath screening devices)
- The approval, supply and testing of apparatus for determining the concentration of alcohol in the breath (evidential breath testing instruments)
- Provision of expert assistance to the Courts and DTTAS.
- Provision of training courses for EvidenzerIRL Operators and Supervisors.
- Collection and analysis of data in relation to evidential breath alcohol tests.



Roadside Breath Alcohol Testing

The Bureau continued to support the Draeger 6510 electronic devices issued to An Garda Síochána in approximately 346 Garda Stations.



Evidential Breath Alcohol Testing

The Bureau continued to support the eighty six EvidenzerIRL instruments in Garda Stations.

Training

The Bureau continued to provide Operator and Supervisor training courses in conjunction with An Garda Síochána. This is a one and a half day training course which was devised to train Garda Operators and Supervisors in the use of the EvidenzerIRL instrument.

The following training courses were held during 2014:

- Fourteen Operator/Supervisor Training Courses (259 Operators and 87 Supervisors)

Table 7
Certified Breath Alcohol Level – Comparison with previous year

µg. of Alcohol per 100ml of Breath	2014		2013	
	No	(%)	No	(%)
0 - 9	425	9.0%	403	9.2%
10 – 22	648	13.8%	575	13.2%
23-35	740	15.8%	652	14.9%
36 – 44	466	9.9%	474	10.8%
45 – 66	1,224	6.1%	1,081	24.7%
67 & Over	1,195	5.4%	1,196	27.3%

Breath Alcohol Analysis

In 2014 a total of 5,266 breath specimens were taken in Garda Stations, this is a increase of 4.7% on 2013. 4,698 of the specimens were certified; 77.2% were over the legal limit of 22µg/100ml. Of the total number of breath tests registered, 568 tests did not result in a statement under Section 13 of the Road Traffic Act being provided.

Testing & Visits to Garda Stations

Bureau Scientists visited and tested each instrument that had been previously installed in Garda stations on at least two occasions during 2014. Bureau scientists have made in excess of two hundred and ten visits to EBT instrument locations throughout Ireland during the year. These visits covered testing and maintenance and are an essential element in assuring the quality of breath alcohol test results for evidential purposes.

Mean Alcohol Level in Breath

The mean alcohol level in breath was 46.9µg/100ml.

Analysis of Time

Of the total number of breath specimens received 70.2% were provided between the hours of 9.00 p.m. and 6.00 a.m., 12.8% between 4.00 p.m. and 9.00p.m., and the remaining 17.0% between 6.00 a.m. and 4.00 p.m.

Over Twice the Limit of 22 µg /100ml (Breath)

51.5% of breath specimens provided were over twice this limit.

Gender in Evidential Breath Testing Specimens

The number of male drivers required to provide a breath specimens far exceeds the number of female drivers, the male to female ratio being 7.3:1.

Table 8
Gender Profile of Specimens - Breath Alcohol Analysis

Gender	2014		2013	
Male	4,180	87.6%	3,825	87.3%
Female	580	12.3%	556	12.7%
Not Stated	0	0%	0	0%

Table 9
Age Profile of Specimens - Breath Alcohol Analysis

Age Profile	2014		2013	
	No.	%	No.	%
≤ 24	828	17.6	826	18.9
25 – 44	2,620	55.8	2,395	54.7
45 – 54	701	14.9	666	15.2
≥55	548	11.7	488	11.1
Not Stated	1	0	6	0.1

Professional Witness

The area of road traffic safety enforcement and in particular driving under the influence of intoxicants (both alcohol and drugs) is the most litigated area in criminal law sphere in Ireland. The Bureau is involved in advising on and through its scientists appearing in cases before the Courts.

During 2014 the Bureau continued to provide independent professional expert support to assist the Courts in the administration of justice. Members of Bureau staff provided expert professional evidence in nine court cases, of which two related to blood and urine alcohol analysis. Six were legal challenges in relation to evidential breath testing and one related to drug analysis.

Quality Assurance

The Medical Bureau of Road Safety maintained its ISO 17025 Accreditation in 2014 for the four areas of: Blood and urine alcohol analysis; Drug analysis; Evidential Breath Testing; and Preliminary Breath Testing for which it has accreditation.

Extension to scope was acquired in early 2013 to include Flexible Scope; this was to facilitate the addition of new drug tests to the Bureau's scope of accreditation as they are developed in-house. A list of additional accredited tests (LAAT) is maintained as part of the flexible scope procedure; Benzodiazepine in blood testing was added to the LAAT in late 2014. The granting of the Flexible Scope is a testament to the excellent quality management system in place in the Bureau.

Financial Information

The Medical Bureau of Road Safety derives its finances from an Annual Grant out of the Vote for the Department of Transport. The total grant allocation for the Bureau for 2014 was €4,455,000. Throughout 2014 comprehensive ongoing budgetary monitoring was maintained and the Bureau had savings of €200,000 which was made available to the Department of Transport, Tourism and Sport for 2014.

Corporate Governance

The Board of the Medical Bureau of Road Safety operates in accordance with the Code of Practice for the Governance of State Bodies. The Board is accountable to the Department of Transport, Tourism and Sport and the Department of Finance. The Board meets regularly and is responsible for the proper management of the Bureau. It makes major strategic decisions and reviews the Bureau's risk management strategy and control processes on an annual basis.

Board Members

The Board of the Medical Bureau of Road Safety comprises of five members (including the Director) and is appointed by the Minister for Transport, Tourism and Sport. Ms. Nicola Hayes was appointed to the board on 20th April 2014.



Name	Position	Attendance Record
Professor Cecily Kelleher	Chairman	4 of 4
Professor Denis Cusack	Board Member and Director	4 of 4
Ms. Nicola Hayes	Board Member	3 of 3
Mr. Philip Joyce	Board Member	4 of 4
Dr. Niall McNamara	Board Member	3 of 4

Bureau Membership and Meetings

During 2014 the Medical Bureau of Road Safety held four meetings. These meetings were held on 3rd April 2014, 19th June 2014, 24th September 2014 and 11th December 2014.

Schedule of Fees and Aggregate Expenses Paid to Directors During 2014

During 2014 the following fees were paid:

Board Member	TYPE OF FEE	PAID
Mr. Philip Joyce, Member	Fee for Non-Executive members of Boards of State Bodies	€5,985
Dr. Niall McNamara	Fee for Non-Executive members of Boards of State Bodies	€5,985

Compliance

The Board is pleased to report that during the year ended 31st December 2014 the Medical Bureau of Road Safety complied with the relevant provisions of the Code of Practice for the Governance of State Bodies. An internal audit was performed.

Ethics in Public Office Acts

The members of the Board who held office at the 31st December 2014 had no interests for the purposes of the Ethics in Public Office Acts 1995 and 2001.

Audit Committee

The Audit Committee reviews any aspect which relates to the financial matters of the Medical Bureau of Road Safety. The committee operates under formal terms of

reference. The meetings are normally attended by the members of the Committee and it reports to the Board on a bi-annual basis.

External Financial Audit

The Comptroller and Auditor General performed the annual audit of the 2014 Financial Statements during 2015. No significant issues were raised during the course of the audit.

Internal Audit

The internal audit function is a key element in informing the Board on the effectiveness of the system of internal financial control. The internal auditor operates in accordance with the Code of Practice for the Governance of State Bodies. An Internal Audit report was prepared in relation to 2014.

Procurement

Competitive tendering is the normal policy utilised by the Board of the Medical Bureau of Road Safety in the procurement process. It affirms that it complied with procurement procedures and relevant EU Directives as set out in the Code of Practice for the Governance of State Bodies during 2014.

Strategic Planning

The Bureau compiled its Annual Strategic Plan for 2015 and also its Five Year Strategic Plan 2015 -2019 and both strategies were forwarded to the Minister. The Plans set out the Bureau's key objectives over the coming year and years in conjunction with its key actions to achieve these objectives. Both strategies can be viewed on the Bureau's website.

Prompt Payment of Account

The Board acknowledges their responsibility for ensuring compliance in relation to the Prompt Payment of Accounts Act. Under an agreement with University College Dublin, suppliers are paid in the first instance by the College which is then reimbursed by the Bureau. It is the policy of the Medical Bureau of Road Safety to ensure that all invoices are paid promptly. University College Dublin, as a public sector body, is required to comply with the requirements of the Act in relation to payments to suppliers for the supply of goods or services and therefore has very strict procedures in operation.

In the case of a small number of suppliers, when the Bureau receives an invoice it will issue a payment by cheque directly to the supplier. The controls in relation to processing of invoices, credit notes and dealing with supplier disputes can only provide reasonable and not absolute assurance against material non-compliance with the Act.

STATEMENT ON INTERNAL FINANCIAL CONTROL

Responsibility of Internal Control

On behalf of the Members of the Medical Bureau of Road Safety, I acknowledge our responsibility for ensuring that an effective system of internal financial control is maintained and operated.

The system can only provide reasonable and not absolute assurance that assets are safeguarded, transactions authorised and properly recorded, and that material errors or other irregularities are either prevented or would be detected in a timely period.

Key Control Procedures

The Bureau has set out the following key procedures designed to provide effective internal financial control within the Bureau. The Bureau has agreed that the Director and staff are responsible for operational matters. The Director reports to the Bureau at its meetings of which four were held in 2014.

The Bureau has set out its financial procedures and delegation practices to ensure a transparent control environment appropriate to a small semi-state agency. The Bureau has an Audit Committee to support quality assurance of financial procedures. The Committee held two meetings during 2014 and reported to the Bureau.

The system of internal financial control is based on a framework of regular management information, administrative procedures including segregation of duties, and a system of delegation and accountability. In particular it includes:

- Comprehensive budgeting system with an annual budget which is reviewed and agreed by the Bureau.
- Regular reviews by the Bureau of periodic and annual financial reports which indicate financial performance against forecasts.
- Setting targets to measure operational financial and other performance.
- Formal project management disciplines.

The Bureau has an internal audit function, which operates in accordance with the Code of Practice for the Governance of State Bodies. The Bureau's monitoring and review of the effectiveness of the system of internal financial control is informed by the work of the internal auditor, the audit committee and the executive of the Bureau which has responsibility for the development and maintenance of the financial controls framework, and comments made by the Comptroller and Auditor General in his report, as applicable.

The Bureau's payments to suppliers (except those pertaining to capital equipment) and salary payments processed on its behalf by UCD. The Bureau pays UCD for the service provided based on a percentage of the total amounts paid.

Annual Review of Controls

The Bureau did carry out a review of the effectiveness of its system of internal financial control in respect of 2014 in accordance with the requirements.

Professor Cecily Kelleher
Chairman



Freedom of Information

During 2014 the Bureau received one request which was dealt with by the administrative pathway outside of Freedom of Information.

Staffing

The Bureau continued during 2014 to operate within its Employment Control Framework complement.

During the year there were changes in Bureau staffing following resignations and the retirements of Ms. Pauline Leavy, Chief Analyst and Mr. Kevin Lyons, Senior Technical Officer whose long service to the Bureau were acknowledged by the Board and their colleagues.

All staff continued to demonstrate flexibility to ensure that all programmes were maintained and that the additional projects were given the assistance required.

Organisational Chart



Conferences, Training & Seminar Presentations

1. Three Analysts attended a one and a half day Agilent GCMSMS Instrument Training course on 8th January 2014 in MBRS.
2. The IT Officer attended a five-day training course on Oracle Database Admin. (Module 1) on 13th to 17th January 2014 in Castle River House, Dublin 2.
3. A Principal Analyst attended a meeting and site visit of a mouthpiece manufacturing company on 23rd and 24th January 2014 in Tibro, Sweden.
4. The Director attended a Medico-Legal Society of Ireland Academic Study Day on 25th January 2014 at Dublin Castle.
5. The IT Officer attended a five-day training course on CompTIA Security + from 27th to 31st January 2014 at New Horizon, Dublin 1.
6. The Quality Manager attended a one-day training course in Excellence in Report Writing on 11th February 2014 in Dublin.
7. The Technical Officer attended a six-day training course in CompTIA Security + from 24th February to 05th March 2014 in IACT, Dublin 2.
8. The IT Officer attended a five-day training course on Oracle Database Admin. (Module 2) from 24th to 28th February 2014 in Castle River House, Dublin 2.
9. A Senior Analyst attended a one-day seminar on Agilent MS on 25th February 2014 at the Pesticides Control Laboratory, Co. Kildare.
10. A Senior Analyst attended a half-day training course on PowerPoint on 12th March 2014 in UCD.
11. Two Senior Analysts attended a two-hour Bartender training course on 18th March 2014 in MBRS.
12. A Senior Analyst attended a three-day Nautilus Instrument Integration training course from 18th to 20th March 2014 in Cheshire, England.
13. The Quality Manager attended a half-day training course in Advanced Excel on 19th March 2014 in UCD.

14. An Analyst attended a two-day Train the Trainer course on 19th and 20th of March 2014 in UCD.
15. The Senior Reception Attendant completed a one-day course in Legionella Awareness Training on 26th March 2014 at The Carlton Hotel, Dublin.
16. An Analyst attended the IACT conference from 6th to 11th April 2014 in California, USA.
17. Two Analysts attended a five-day Borkenstein training course on 07th to 11th April 2014 at University of Glasgow, Scotland.
18. The Director attended a half-day Medico-Legal Seminar on Personal Injuries on 05th May 2014 at the Conrad Hotel, Dublin.
19. A Principal Analyst, a Senior Analyst and an Analyst attended the one-day Irish Mass Spectrometry Society conference on 07th May 2014 at the Red Cow Hotel, Dublin.
20. The Director attended, and was a speaker at, the one-day Medico-Legal Society of Ireland Seminar on 17th May 2014 in Ennis, Co. Clare.
21. A Senior Analyst attended a training course on PC Troubleshooting and Repair over three days 19th and 26th May, and 03rd June 2014 at IACT, Dublin.
22. An Analyst attended a one-day HPLC & UHPLC Troubleshooting Course on 28th May 2014 at the Glenroyal Hotel, Maynooth, Co Kildare.
23. An Analyst attended a one-day course in LC-MS/MS for Chromatographers on 29th May 2014 at the Glenroyal Hotel, Maynooth, Co. Kildare.
24. A Senior Analyst attended the TIAFT conference on 5th and 6th June 2014 in the University of Glasgow, Scotland.
25. A Senior Analyst attended a three-day Thermo Scientific Connects conference from 09th to 11th June 2014 in Barcelona, Spain.
26. The Technical Officer attended the one-day Technical Officers Development Conference on 17th June 2014 in UCD.
27. The Director attended an International Conference, the 23rd Meeting



- Forensic Medicine - Alpe - Adria - Pannonia, over three days from 26th - 28th June 2014 in Lausanne, Switzerland.
28. The IT Officer attended a HEANET DNS workshop on the 7th of July 2014 in IFSC, Dublin 1.
29. A Principal Analyst and two Senior Analysts attended the UKIAFT conference on 28th and 29th August 2014 at University of Leicester, England.
30. The IT Officer attended a Windows Server 2012 training course on 8th to 12th September 2014, 6th to 10th October 2014 and 20th to 24th October 2014 at New Horizon, Dublin 1.
31. A Principal Analyst attended the OIML R126 and Software Validation Working Group Meeting over three days from 23rd to 25th September 2014 in Paris, France. A Senior Analyst attended for the first day of the meeting.
32. The Director attended and was a speaker at the half-day Medico-Legal Society of Ireland Meeting on 25th September 2014.
33. A Senior Administrative Officer and an Administrative Officer attended the one-day FRS 102 Comptroller & Auditor General Briefing Day on 25th September 2014 in Dublin Castle, Dublin.
34. An Administrative Officer attended a one-day course on Freedom Of Information for Decision Makers on 30th September 2014 at the Institute of Public Administration, Dublin.
35. In September 2014 a Senior Analyst and an Analyst commenced a two-year Diploma in Ethnopharmacology for Toxicologists in UCD.
36. Two Senior Analysts attended the eight-day SOFT conference from 17th to 24th October 2014 in Michigan, USA.
37. The Chief Analyst, a Senior Analyst and an Executive Assistant attended two half-day Paradigm Instruction Sessions on 04th and 18th November 2014 in MBRS.
38. Four Analysts, an Administrative Officer and an Executive Assistant attended a one-day Courtroom Skills Training course on 05th

November 2014 in MBRS.

39. The Chief Analyst attended the five-day conference of The International Association of Forensic Toxicologists from 9th to 13th November 2014 in Buenos Aries, Argentina.
40. Four Analysts attended a three-day training course on LCMSMS Basic 4000 QTrap from 11th to 13th November 2014 in MBRS.
41. A Principal Analyst attended a meeting of the Irish Mass Spectrometry Society on the 13th November 2014 in Dublin.
42. The Director, Chief Analyst, and two Principal Analysts attended a half day National Meeting provided by the Road Safety Authority on Driving Under the Influence of Drugs on 25th November 2014.
43. A Senior Analyst and two Analysts (one presenting) attended the one-day conference of the Irish society of Toxicology on 28th November 2014 in UCD.
44. Two Senior Analysts and an Analyst attended a one-day conference on Expert Evidence in Ireland 2014 and Beyond on 04th December 2014 in Clontarf Castle, Dublin.
45. The Laboratory Attendant attended a four-hour training course on VWR Biomarke on 18th December 2014 in UCD.
46. A Principal Analyst attended four meetings of the National Advisory Committee on Drugs and Alcohol on 07th and 28th February 2014, 29th May 2014 and 20th November 2014 in Dublin.
47. An Administrative Officer and two Executive Assistants attended a two-hour course in UCD on eProcurement on 12th February, 21st October and 17th December 2014 respectively.

Energy Consumption

Under the Government's commitment to improve public energy efficiency by 33% in 2020 the Medical Bureau of Road Safety has registered for and is reporting through the SEAI online system.

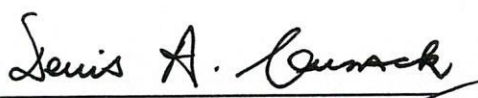
The Bureau's main energy usage is electricity consumption that is necessary for operating a forensic laboratory, e.g. heating and lighting, laboratory equipment, air handling, computers and servers.

The Bureau has introduced a number of initiatives to improve energy efficiency. A Building Management System (BMS) is used to monitor and control heating, air handling units, water boiler (direct hot water supply) and extractor fans. Each of the four floors of the Bureau's premises is managed individually and automatic controls are scheduled accordingly. Energy efficient light bulbs, movement sensors and timer switches have been fitted throughout the building to further reduced energy consumption.

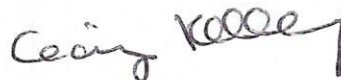
The Medical Bureau of Road Safety is currently on target to achieve the 33% improvement in energy efficiency in 2020.

Legal Disclaimer

The descriptions and statistics contained within this report are of a condensed and general informative nature only. They should not, by themselves, be relied upon in determining legal rights or other decisions under the Road Traffic Acts. Readers and users are advised to verify with their legal advisors any information on which they may wish to rely.



**Professor Denis A. Cusack,
Director.**



**Professor Cecily Kelleher,
Chairman.**