M.A.T./M.I.T. Checkpoint Examination

Examination of the recording of Breath Tests at Mandatory Alcohol/Intoxicant Testing (M.A.T./M.I.T.) Checkpoints

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Assistant Commissioner
11th August 2017

Terms of Reference;

'The examination of the processes and procedures in place, for the period 2010 to 2016, for the recording of breath testing at Mandatory Alcohol Testing (M.A.T.) Checkpoints and which resulted in the inaccurate recording of those statistics which were provided to agencies outside of An Garda Síochána and which were also published on the Garda website".

Executive Summary

On the 24th March, 2017, the Deputy Commissioner in charge of Policing and Security, John Twomey, appointed Assistant Commissioner Michael O'Sullivan to commence an examination into the recording of breath tests at Mandatory Alcohol Testing (M.A.T.) checkpoints for the period 2010 to 2016. Following the commencement of the examination it was requested to change the terms of reference to extend the period of examination from June 2009 to April 2017. This was due to the commencement of the recording of M.A.T./M.I.T. checkpoints on PULSE in June 2009, and, difficulties in establishing accurate data for the original time frame. This request was agreed to.

The examination calculated breath test data from 7th June 2009 – 10th April 2017 and determined that 3,498,400 breath tests were recorded on PULSE compared to 2,040,179 recorded on Dräger devices. This identified a discrepancy of 1,458,221 breath tests between the Dräger count and the PULSE count, which reflects a 71% disparity between breath tests recorded on Dräger and those recorded on PULSE. The total number of M.A.T./M.I.T. checkpoints conducted during this time period was 523,198.

This examination process involved the investigation of the conduct and recording of M.A.T./M.I.T. checkpoints with a view to identifying factors contributing to the numerical conflict in breath test data. A combination of factors have been identified. Of these factors three have been identified as potentially significant contributants, singularly or cumulatively, to the total discrepancy between PULSE and Dräger count. These factors are 1) Recording Issues, 2) Suspected breath test inflation, 3) Estimation of the numerical data in the PULSE checkpoint tab. Due to the limitations in the available data combined with the IT systems used for the recording and collection of that data, it has not been possible to determine the full impact, or give a weighting, to each of the three factors.

The Garda Information Service Centre (G.I.S.C.) has responsibility for inputting PULSE data over the phone from Gardaí and created 97% of all M.A.T./M.I.T. checkpoint incidents on PULSE. G.I.S.C. retain a recording of all the calls made for a period of 7 years. This allowed for some comparison to be made between records created on PULSE and the related call recordings retained at G.I.S.C.

Based on the analysis of a random sample, using a 95% confidence interval and a 3% margin of error it was determined that between 3% and 9% of M.A.T./M.I.T. checkpoints on PULSE (or between 15,082 and 45,246 checkpoint incidents) are estimated to have inflated breath tests, with the number of breath tests over what should have been recorded estimated to range between 106,177 and 318,530. Also, between 7% and 13% of M.A.T./M.I.T. checkpoints (between 35,191 and 65,355 checkpoint incidents) are estimated to contain recording errors. It has not been possible to quantify how these errors impacted on the accuracy of breath test data. These figures are not mutually exclusive. To identify issues relating to specific checkpoints that resulted in this discrepancy would require a forensic examination of each of the 523,198 checkpoint incidents entailing significant resources dedicated to this task over an extended period of time.

In total 2,131 specific checkpoint incidents were identified with potentially 69,644 inflated breath tests. These incidents were identified by using a formulaic approach taking into account the duration of the checkpoint and the number of Garda personnel present. These cases have been referred to the Regions for further examination and formal investigation where necessary. Identifying other checkpoint incidents that contain inflated breath tests that are less obvious is a more complex task.

The examination team also considered how an environment existed where the discrepancies identified were allowed to continue without intervention. There is a combination of factors which enabled this to happen. These have been identified as deficiencies in technology and data controls, resources, supervision, policy and procedures and training.

There were suggestions that management were responsible for the inflation of breath test data on PULSE as it was they who set overly ambitious M.A.T./M.I.T. checkpoint schedules which due to competing demands and priorities may not have been performed. There were no review processes put in place to determine resource capacity to carry out the number of checkpoints being scheduled. It is important to highlight that while the actual outcome was undesirable; the focus of management appears to have been the persistent detection of intoxicated drivers and saving lives. The examination team found no evidence of any tangible benefit which would have acted as a catalyst to encourage Garda members to inflate breath test figures. There was no career advancement or other obvious rewards to be gained from engaging in this practice. Constant,

throughout the examination was the issue of inadequate technology, almost exclusively reliant on human input which made the collection and quality control of reliable data a most difficult task. There was no inbuilt technological support designed to ensure the accuracy of this data. The process of recording accurate breath test data on PULSE is further complicated by the unique arrangement in policing where Gardaí contact a call centre (G.I.S.C.) to input data and are then required to upgrade and correct data entries. This lead to communication and recording anomalies as identified in 2017 when the level of inflation extended to over 6 million breath tests recorded. This anomaly has since been resolved and the imminent release of PULSE 7.2 will prevent any such occurrence.

The various tabs within M.A.T./M.I.T. checkpoint incidents required completion of fields which were of no obvious value to those whose responsibility it was to gather the information and populate same. There was never a rationale given at any level in the organisation for the need to record the breath tests of sober drivers and thus the experience of this examination was that the importance of such data was not apparent to individual members of An Garda Síochána of any rank.

The examination team received consistent comment from Garda management, who were consulted during this examination, regarding the difficulties being encountered in maintaining the expected policing service with the resources available to them. Between 2008-2013, there was a continual decrease in resources, resulting in greater workloads being placed on individual Gardaí and an expectation on managers to do more with less. Specialist units, such as Roads Policing Units, had been depleted to ensure Districts could deliver on front line service provision.

The Garda National Traffic Bureau (G.N.T.B.) was not immune from personnel cut-backs. As a result of the economic down-turn; senior management positions within this Bureau remained unfilled and these additional roles were assigned to Officers with other full time areas of responsibility. This was contrary to the recommendations of the Garda Inspectorate Report 2008 and led to a lack of leadership and governance in the area of Roads Policing.

There was also a significant decrease in the number of front-line supervisors. When supervision is absent poor practices will inevitably develop and continue to deteriorate if left unchecked. Unfortunately this was evident throughout this examination.

This examination found that policy documents pertaining to M.A.T./M.I.T. checkpoints were complicated documents that were difficult to locate, and sometimes consisted of hundreds of pages. These were not well communicated to frontline officers. This resulted in a scenario where important information, contained within these operational directives, was subject to individual interpretation, posing significant organisational risk.

This report recognises the limited effect that a lack of training had in terms of the overall issues that resulted in this examination process. It is, nonetheless, an important deficit that has existed in An Garda Síochána for some years now and many of the procedural issues identified could have been resolved, quite easily, by appropriate training.

The recommendations from this report reduce the risk of a re-occurrence as will the recommendations of the Garda Inspectorate Report of 2008 insofar as they impact on matters subject of this report.

The roll out of the new Garda Code of Ethics reinforces to all members what constitutes ethical behavior of a modern police service. It requires that everyone who works in An Garda Síochána demonstrates leadership and good example by ensuring that the standards of the code of ethics are adhered to.

The views expressed in this report are not intended to dilute, in any way, what has transpired in the past. An Garda Síochána, as an organisation, released breath test data into the public domain on an annual basis. It is reasonable that members of the public and external agencies who then relied upon these figures should expect that they were accurate and that the collection of this data had been subject to robust governance procedures. The failure to ensure that this occurred reflects poorly on the professionalism with which this organisation discharged its responsibilities. That the evidence also suggests members of An Garda Síochána were also engaged in inflating this data, whether intentional or unintentional, is even more damaging to public confidence.

This examination did not discover any behaviour that would merit criminal investigation. As stated, all incidents identified with inflated breath test figures have been referred to Regional Commissioners for further examination/investigation as deemed necessary.

At the time of finalising this report the examination team are working closely to assist with "Crowe Horwath" who have been commissioned on behalf of the Policing Authority to undertake a similar examination including a review of the processes and outcome of this examination. The Garda examination team will continue to assist "Crowe Horwath" and their colleagues in "iNEQE" until completion of their work.

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CPD	Continuous Professional Development
GISC	Garda Information Services Centre
GIAS	Garda Internal Audit Section
GNTB	Garda National Traffic Bureau (renamed GNRPB in September 2016)
GNRPB	Garda National Roads Policing Bureau
GPSU	Garda Professional Standards Unit
GSAS	Garda Síochána Analysis service
IAS	Information Analysis Service
HRPD	Human Resource and People Development
KPI	Key Performance Indicator
MAT	Mandatory Alcohol Testing
MIT	Mandatory Intoxication Testing
MBRS	Medical Bureau of Road Safety
PNSI	Police Service of Northern Ireland
PULSE	Police Using Leading Systems Effectively
RSA	Road Safety Authority

1. Introduction

The primary organisational function of An Garda Síochána is the protection of life. However, prior to 2006, over 300 people per year died on Irish roads. Statistical analysis identified drink driving as a significant contributory factor to road traffic collisions which resulted in fatalities of all categories of road users. It was deemed an issue requiring a cultural change within general society through extensive, overt enforcement of road traffic legislation. This power was provided to An Garda Síochána by the Oireachtas in 2006; with the result that An Garda Síochána was in the position to perform checkpoints designed to randomly test drivers to determine whether or not they had consumed alcohol.

An Garda Síochána's focus from 2006 until the present time has been oriented towards utilising Mandatory Alcohol Testing/Mandatory Intoxicant Testing (M.A.T./M.I.T.) checkpoints as a mechanism for reducing road fatalities. Since the introduction of mandatory alcohol testing there has been a notable reduction in the number of people who have died each year on Irish roads.

Until recently, the M.A.T./M.I.T. checkpoint policy employed by An Garda Síochána was considered to be a significant factor in the reduction of road traffic collisions. However, in March 2017 when breath test data was released into the public domain, it indicated that An Garda Síochána had over recorded the number of breath tests conducted between the 1st November 2011 and the 31st October 2016 by 937,212 when compared against breath test data held by the Medical Bureau of Road Safety (M.B.R.S.). As a result, the entire enforcement process employed by An Garda Síochána was called into question.

As a result of these inconsistencies, on the 24th March 2017, Deputy Commissioner Policing and Security appointed Assistant Commissioner Michael O'Sullivan to commence an examination into the recording of breath tests at M.A.T. checkpoints from the 1st November 2011 until the 31st October 2016.

2. Overview

On the 21st July 2006 M.A.T. checkpoints were introduced by the enactment of Section 4 of the Road Traffic Act 2006. This was an entirely new development for An Garda Síochána and for the first three years after the introduction of mandatory alcohol testing there was no provision on PULSE to specifically record a M.A.T. checkpoint. During this time period, most M.A.T. checkpoints were not electronically recorded. Some local managers developed a practice of recording these under the generic category of "Attention and Complaints" and a small number are still on the PULSE system under this category.

On the 7th June 2009, PULSE Release 5.0 was deployed throughout the organisation. This upgrade created a specific category type for M.A.T. checkpoints on PULSE. It required Garda members to provide the details of the M.A.T./M.I.T. checkpoint, including the number of breath tests conducted. From this point forward, statistical data could be generated from such incidents.

In April 2014, the then Minister of the Department of Transport, Tourism and Sport forwarded to the Garda Commissioner an anonymous correspondence he had received from the Chairman of the Road Safety Authority (R.S.A.). One of the central issues raised within this correspondence was that M.A.T. checkpoints were not being conducted and that the number of breath tests were being intentionally inflated.

The source of this information remains unidentified. Despite the anonymous nature of the information provided and the lack of specifics to indicate exactly where this issue was occurring; action was taken with a view to determining the veracity of the complaint. A preliminary enquiry was set up by Assistant Commissioner Policing, Security and Operations. In July 2015, the Superintendent from the Garda National Traffic Bureau (G.N.T.B.) set up a working group to examine the recording of data on PULSE in respect of M.A.T./M.I.T. checkpoints and breath tests.

As a result, breath tests performed at M.A.T. checkpoints in the Southern Region between 2009-2014 were examined. This resulted in the submission of a written report which indicated a disparity of 17% between the number of breath tests recorded on PULSE and the number of

breath tests recorded on the Dräger devices.[1] This report was reviewed as part of this examination. It became apparent that the time period within which the two sets of data were collected was not suitable for comparison. Therefore, no reliance could be placed on the findings made.

In June 2016, having considered the findings of the above report, the Department of Justice raised concerns regarding the veracity of breath test data recorded on PULSE. G.N.T.B. commenced a national examination into the matter and the R.S.A. were informed.

In July 2016, each Divisional Officer was instructed to conduct an audit within their Division into M.A.T./M.I.T. checkpoints. The exact methodology of this audit was specified and included the allocation of Dräger devices, the number of mouthpieces and the authorisation of checkpoints.

G.N.T.B. amalgamated the information submitted by the Divisions and produced an interim report. Due to concerns surrounding breath test data, G.N.T.B. sought breath test data retained by the M.B.R.S. to compare against the breath test data retained by An Garda Síochána. The comparison period was from the 1st November 2011 to the 31st October 2016. As a result of this examination it became apparent that 937,212 extra breath tests were recorded by An Garda Síochána when compared against Dräger devices.

On 21st March 2017, An Garda Síochána informed the Policing Authority of this discrepancy and released the information to the public shortly afterwards. On the 24th March 2017 Assistant Commissioner O'Sullivan was appointed to commence an examination into the recording of breath tests at M.A.T. checkpoints from the 1st November 2011 until the 31st October 2016.

However, the period under examination was changed to the 7th June 2009 – 10th April 2017 to facilitate the calculation of the most reliable breath test data from Dräger devices nationwide to compare against figures on PULSE. The primary reason for the chosen timescale was that breath tests were only recorded on PULSE from 7th June 2009. The 10th of April 2017 was selected as an end date to allow the readings from all Dräger devices to be collated on a specific date; this enabled a direct comparison between the two sets of data. (The numbers of breath tests on

[1] Dräger devices are a handheld devices used to detect the presence of alcohol in the breath.

individual Dräger devices are, ordinarily, only recorded when submitted to the Medical Bureau of Road Safety (M.B.R.S) for calibration every six months.)

The terms of reference originally set out for this examination have been expanded to incorporate the time frame from 7th June 2009 to 10th April 2017. It has been determined that 1,458,221 more breath tests were recorded on the PULSE system when compared against Dräger devices nationally within this period. The extent of all work conducted during the examination to identify the cause of this numerical disparity is detailed within the body of this report.

3. Methodology

A detailed project plan and structured approach was developed and agreed. The following methodology was broadly applied and refined during the course of the examination. As part of the examination the following actions were taken;

- A review was conducted of all legislative, policy and procedure documents governing M.A.T./M.I.T. checkpoints and the recording of breath tests.
- A review was conducted of all previous examinations carried out within An Garda Síochána in relation to breath test data.
- Field visits to M.B.R.S. were conducted in order to gain an understanding of their role, function, and their procedures in relation to Dräger devices.
- A national count in respect of all Drägers devices on the weekend of the 8th and 9th April 2017 was obtained.
- A national count in respect of all mouthpieces utilised by An Garda Síochána since the inception of M.A.T. checkpoints was conducted.
- A comparison was conducted between the number of mouthpieces utilised against breath tests recorded on Dräger devices and breath tests recorded on PULSE.
- The overall number of breath tests recorded on Dräger devices was compared to the total number of breath tests conducted at M.A.T./M.I.T. checkpoints on PULSE between 7th June 2009 and 10th April 2017. A Divisional comparison of Dräger breath test data compared against PULSE breath test data was also conducted.
- An explorative analysis was conducted on a number of PULSE M.A.T./M.I.T. checkpoint incidents on PULSE.
- A random sample of 2,136 PULSE M.A.T./M.I.T. checkpoint incidents was examined to estimate the scale of recording errors and over recording of breath tests on PULSE.
- An examination was conducted on data for M.A.T. checkpoint incidents recorded in the first six months of 2012 to ascertain how G.I.S.C. applied the instruction that the number of "vehicles stopped and controlled" should equal the number of positive, negative and failed/refused breath tests and how it affected breath test recording on PULSE.
- An analysis of all M.A.T./M.I.T. checkpoint incidents with 50 or more breath tests (3,972) was conducted to identify incidents with over recorded breath test figures.

- An analysis was conducted on all "Attention and Complaints" PULSE incidents from 2006 – 2009 to establish if any M.A.T. checkpoints were recorded under this category.
- Field visits to G.I.S.C. were conducted and a sample of call recordings were reviewed for the purpose of verifying issues identified and to gain an understanding of the process. The policy and procedure governing the recording of M.A.T./M.I.T. checkpoints at G.I.S.C. was also established.
- Divisional field work was conducted in all Regions to acquire insight and feedback into the discrepancy of breath test data.
- Submissions were canvassed from all employees of An Garda Síochána and Garda staff associations to determine how the disparity in breath test data emerged.
- Consultations were held with Traffic Superintendents and Inspectors from each of the Regions to determine how the disparity in breath test data arose.
- A review was conducted with Police services in other jurisdictions to ascertain their approach to roads policing.
- A review and analysis of staffing and supervisory levels within An Garda Síochána was conducted.
- A review of training and Continuous Professional Development (C.P.D.) related to M.A.T./M.I.T. checkpoints was conducted.

4. M.A.T./M.I.T. Checkpoints

4.1 Overview

Mandatory Alcohol Testing as a concept was introduced by legislation, which established the legal framework that continues to govern this process. The conduct of checkpoints and the recording of data which emanated is guided by extensive Garda policy and procedure documents. This section provides a general overview of the M.A.T./M.I.T. checkpoint process and the subsequent recording of such incidents on PULSE as governed by legislation and policy documents.

4.2 Legislation Governing M.A.T./M.I.T. Checkpoints

Mandatory Alcohol Testing (M.A.T.) checkpoints were introduced by the enactment of **Section 4 of the Road Traffic Act 2006**. On the 21st July 2006 the Act commenced and provided members of An Garda Síochána with the power to stop a vehicle at a M.A.T. checkpoint and require the driver to provide a specimen of his or her breath. The legislation outlined that prior to a M.A.T. checkpoint being established it must be authorised by a member of An Garda Síochána not below the rank of Inspector. It also outlined that the authorisation should be made in writing and specify the date, public place and the times between which the checkpoint will be operated. This act was replaced by **Section 10 of the Road Traffic Act 2010** but, in essence, the process surrounding the establishment of M.A.T. checkpoints remained unchanged.

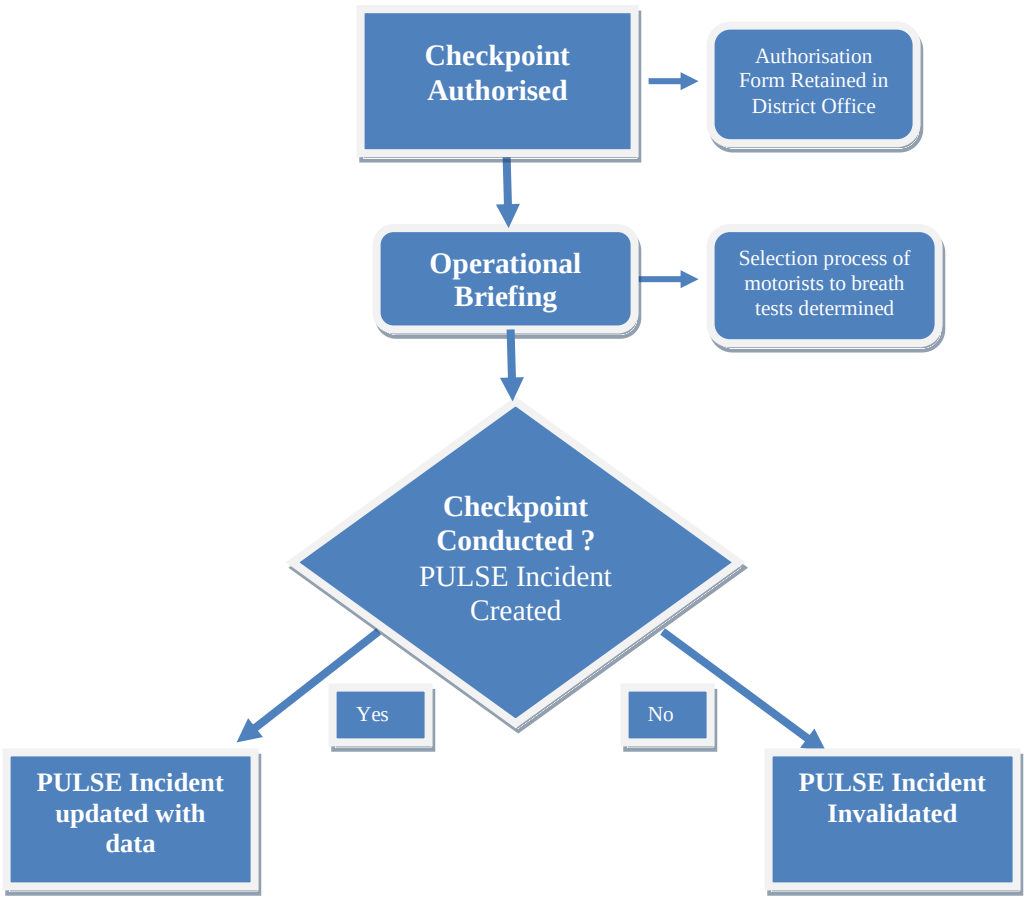
In December 2016, M.A.T. checkpoints were replaced by Mandatory Intoxicant Testing (M.I.T.) checkpoints to allow for the testing of intoxicants (drugs and alcohol). This was enacted by **Section 11 of the Road Traffic Act 2016**.

4.3 Overview of M.A.T./M.I.T. Checkpoint Process

The M.A.T./M.I.T. checkpoint process is as follows; legally, once a M.A.T./M.I.T. checkpoint has been authorised it can be conducted. Garda policy states that before it is conducted an operational briefing should be carried out. The purpose of the briefing is to ensure objectivity and determine the method of selecting the motorists that will be required to provide a specimen of

their breath. In most cases a random approach is selected. From the 7th June 2009 it became mandatory to record all authorised M.A.T. checkpoints on PULSE regardless of whether or not they were conducted. If the M.A.T./M.I.T. checkpoint was not conducted, the incident on PULSE must then be marked invalid. In the vast majority of cases the member conducting the M.A.T./M.I.T. checkpoint creates the incident on PULSE. The authorising officer is responsible for ensuring that an operational briefing occurs prior to the M.A.T./M.I.T. checkpoint. Notwithstanding this fact, supervisory deficiencies can inhibit the occurrence of these briefings. The authorising officer must also ensure the M.A.T./M.I.T. checkpoint incident is created on PULSE.

Figure 1: M.A.T./M.I.T. Checkpoint Process



4.4. Recording of M.A.T./M.I.T. Checkpoints on PULSE

PULSE is the computer system used by An Garda Síochána. It is primarily an operational tool that allows for the systematic recording of incidents dealt with by Garda members on a regular basis, for example: recording details of an assault or a M.A.T./M.I.T. checkpoint.

To create an incident on PULSE Garda members must telephone the Garda Information Service Centre (G.I.S.C.), where trained civilian call takers create the incident based on the information provided to them. G.I.S.C. are responsible for creating approximately 97% of all M.A.T./M.I.T. checkpoint incidents on PULSE with the remainder being inputted manually by Garda members in circumstances where excessive waiting times are experienced. When any incident is created on PULSE, it is reviewed for quality control purposes. If there is an issue, the incident will be marked "Reviewed/Clarification" and sent back to the investigating Garda to make the necessary insertions or changes. G.I.S.C. retain a recording of all calls made for a period of seven years for training and quality purposes.

Initially the majority of M.A.T. checkpoint incidents were not recorded on PULSE primarily because there was no requirement to do so and there was no category specific to M.A.T. checkpoints on PULSE. On the 7th June 2009 the incident category type "*M.A.T. Checkpoint*" was added to PULSE. This enabled Garda members to record such incidents and the associated statistical data, such as the number of breath tests conducted. From this point forward it became compulsory for Garda members to record every M.A.T. checkpoint on PULSE. For any M.A.T./M.I.T. incident created on PULSE a series of compulsory data fields must be completed spanning over three different screens. The following diagrams show the data that needs to be entered in respect of each M.A.T./M.I.T. checkpoint incident. Of particular relevance to this examination is the M.A.T./M.I.T. statistics tab screen at **Figure 4**.

Figure 2 –M.A.T./M.I.T. Checkpoint Incident Creation Screen (Primary details)

Figure 3 – M.A.T./M.I.T. Checkpoint Details Screen (Authorisation /Operational Briefing Details)

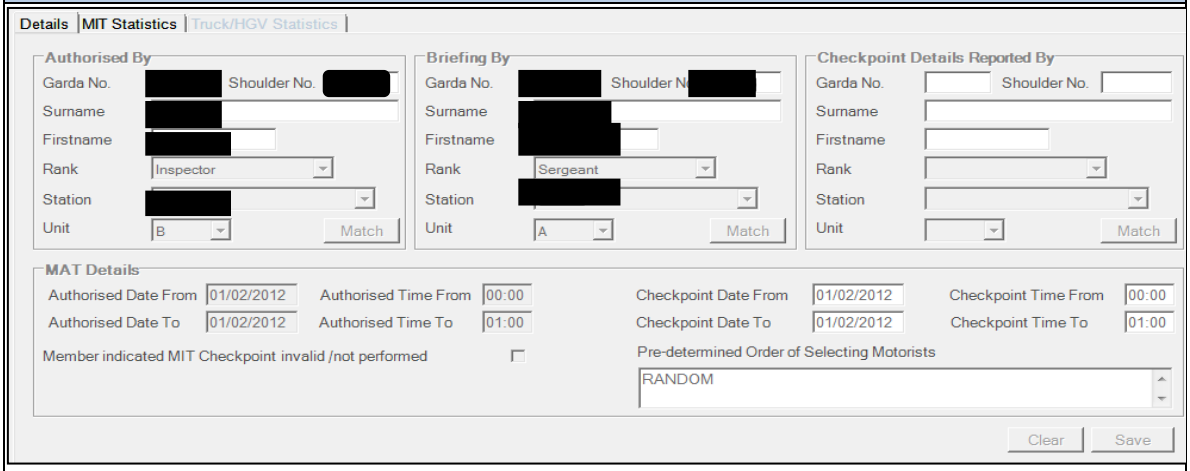
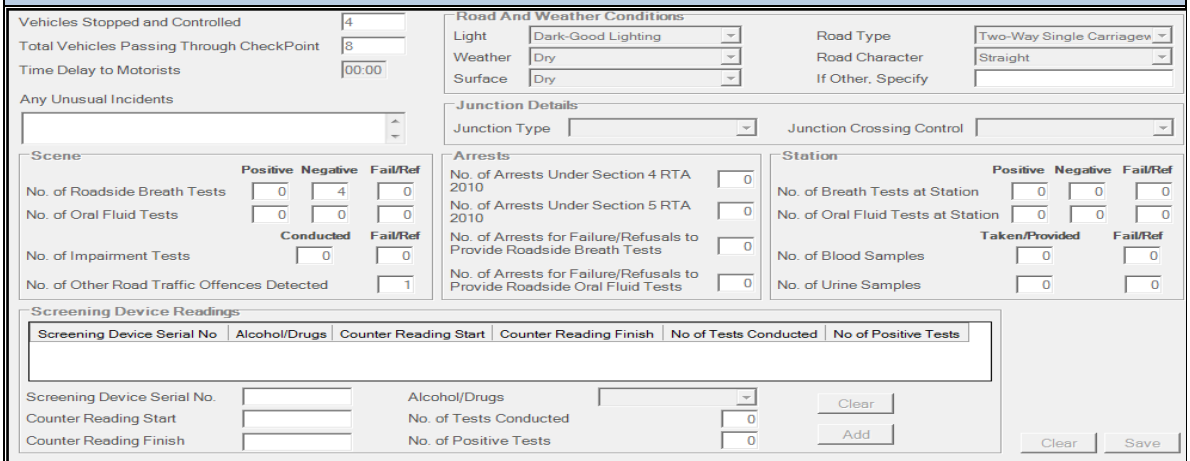


Figure 4 – M.A.T./M.I.T. Statistic Tab (Range of Statistical Data)



4.5 Training/Policy and Procedure Governing M.A.T./M.I.T. Checkpoints

The examination team consulted with the Garda College in Templemore to determine what, if any, training had been provided to Garda members in relation to M.A.T./M.I.T. checkpoints since they were introduced. It was established that no C.P.D. training had been directly provided to Garda members in relation to M.A.T./M.I.T. checkpoints and instructions were primarily given by way of policy documents on the Garda Portal; (an internal online information system which provides organisational information and instruction to all Garda members).

The examination team reviewed fifteen policy documents that relate to M.A.T./M.I.T. checkpoints. Each represented a change in policy or procedure. Aspects from the policies relevant to this examination have been summarised in **Table 1**.

In addition to the policy and procedure documents an informative video was made available to Garda members on the Garda Portal in November 2016. It is an instructional video that illustrated the new features contained in PULSE Release 7.1.

The examination team experienced considerable difficulty in locating policy documents on the Garda Portal due to the fact that the information was stored separately in different locations and folders. Some of these documents extended to hundreds of pages.

Table 1: Summary of Policy Documents

Date	Document	Examination Team Summary of Document
20/07/06	**HQ Directive 115/06** Road Traffic Act 2006 (No:23 of 2006)	Introduction of M.A.T. checkpoint legislation to Garda members. A template authorisation form was provided. Outlined that data should be recorded in a systematic way. Did not specify where such data should be retained. (There was no specific M.A.T. checkpoint category on PULSE at the time). Outlined the following list that **may** be recorded by Garda members. **1**. Time, date, and location of checkpoint. **2**. Weather conditions. **3**. Number of vehicles passing through checkpoint. **4**. Average time delay to motorists. **5**. Predetermined order of selecting motorists. **6.** Number and types of arrests. **7**. Number of motorists tested at checkpoint. **8**. Identification of unusual incidents such as safety problems/ other concerns.
31/07/09	**HQ Directive 105/09** PULSE Release 5.0	Introduction of the **recording of M.A.T. checkpoints on PULSE**. Outlined how the incident should be created and set out the roles and responsibilities in relation to M.A.T. checkpoints. No guidance in relation to the M.A.T. statistics tab other than an instruction to populate the relevant fields.

07/08/09	**HQ Directive 110/09** PULSE Release 5.0	Similar to above. No changes to M.A.T. checkpoints.
July 2010	**PULSE Bulletin 89** PULSE Release 6.0	Introduced the additional fields "Authorised Date & Time To/From" and "Occurred date & Time To/From". It also changed the "**number of vehicles through the checkpoint"** to "**Vehicles Stopped and Controlled**" and added "**Total Vehicles passing through checkpoint**".
27/10/11	**HQ 119/2011** Road Traffic Act 2010/2011	Introduction of the Road Traffic Act 2010/2011. Provided guidelines in relation to the establishment of M.A.T. checkpoints. The guidelines mirror those set out in HQ 115/06 which list point **1 – 8 (HQ 115/06)** that **may** be recorded. They do not refer to the recording of M.A.T. checkpoints on PULSE.
February 2014	**Roads Policing Manual 2014**	219 page document - Chapter 10 relates to M.A.T. checkpoints and mirrors HQ 119/2011 The policy does not mention the M.A.T. statistics tab despite its introduction to the system in 2010 and instead instructs that points **1 – 8 (HQ 115/06) MUST** be provided to G.I.S.C. personnel and recorded on PULSE.
27/05/15	**Instruction regarding Dräger Devices**	Instruction that an audit should be conducted in each District in relation to the condition of all Dräger devices and outlines a new procedure that each Dräger should have storage and use recorded and that a supervisor should be appointed to oversee this system.
07/04/16	**HQ Directive 23/16** Mandatory Alcohol Testing Checkpoints – Recording of Data	Instruction to complete a paper M.A.T. checkpoint return form with a specific 12 point checklist to be completed in relation to statistical data. It also required that the following information be recorded in the narrative of the incident; 1. Serial number of Drägers used at checkpoint 2. Counter reading for each Dräger at the start and end of the checkpoint.
17/04/16	**PULSE Bulletin 104** PULSE Release 6.9	Outlined that M.A.T. checkpoint incidents had a new function whereby they could be systematically reviewed and invalidated if they were not performed.
April 2016 May 2016 August 2016 December 2016	**4 x PULSE Incident Creation Guidelines Version 3.0, 3.1 3.3, 3.4**	Introduced a systematic review of M.A.T. checkpoints. It stated the "**vehicles stopped and controlled = No. of cars stopped and drivers TESTED for alcohol levels".** Three paragraphs later the document states "**vehicles stopped and controlled as the no of cars stopped and drivers ASSESSED for alcohol"**. It also stated that the number of breath tests conducted including failed and refused should equal vehicles stopped and controlled. Each version of the Guidelines contains very similar definitions, with version 3.4 introducing the M.I.T. checkpoint.
02/11/16	**HQ Directive 68/16** Mandatory Alcohol Testing Checkpoints Recording of Data	Removed the need for the M.A.T. checkpoint return form. Instructed that the serial number, start and end reading of each Dräger be recorded in the narrative of the incident. It also stated that the onus of invalidating incidents on PULSE rests with the authorising member. Stated that the PULSE incident summary report should be printed off and appended to the original checkpoint authorisation form.
4/12/16	**PULSE Bulletin 106 – PULSE Release 7.1**	Replaced M.A.T. checkpoints with M.I.T. checkpoints, introduced the mandatory capture of screening devices in the M.I.T. statistics tab. Added a "checkpoint details reported by" tab.

As stated previously, the M.A.T./M.I.T. statistic tab on PULSE is of **particular relevance** to this examination as this is where breath test data is recorded and used for statistical purposes. It is important to note that despite numerous policy documents it seems there were no guidelines provided to Garda members in relation to the completion of the M.A.T./M.I.T. statistics tab until the publication of PULSE Incident Creation Guidelines in April 2016. It is at this juncture that

Garda members had access to a policy which provided the following definition of "vehicles stopped and controlled".

"Vehicles Stopped and Controlled = No of cars stopped and drivers tested for alcohol levels. Because it is a M.A.T. checkpoint it means that the check for alcohol must be requested from the driver of the car that is stopped.

No of negative Roadside Breath Tests + No. of Positive Breath tests +No. of Failure/Refusals to provide Roadside Breath Tests should equal the number of Vehicles Stopped and Controlled."

This examination has determined that the data field, "vehicles stopped and controlled", affected the recording of breath test data on PULSE and its definition is of importance to this examination. This matter will be discussed further in Chapter 8.

From 2010, when the "vehicles stopped and controlled" field was first introduced, until April 2016 Garda members had no guidelines defining "vehicles stopped and controlled" and could only apply a literal meaning; that is, any vehicle that may be stopped or controlled during the course of the checkpoint including but not exclusive to the number of motorists breath tested. For example, a Garda member may stop a motorist if some other road traffic offence is detected e.g. a vehicle with no tax. The driver may not have been breath tested but the vehicle has been literally stopped and controlled by the Garda member.

In November 2012, G.I.S.C. personnel were provided with the definition of "vehicles stopped and controlled" when the G.I.S.C. Manual 2012 was published. This document was an internal G.I.S.C. document and was not accessible to Garda members. Based on the review of policy documents conducted it seems that G.I.S.C. personnel had the definition of "vehicles stopped and controlled" four years before Garda members. This means that this data field was open to misinterpretation by Garda members for the majority of the years under examination.

In all the policy documents surrounding the recording of M.A.T./M.I.T. checkpoints there was no emphasis placed on the importance of accurately recording breath test data in the M.A.T./M.I.T statistics tab and there was no indication to suggest that the data was to be used for statistical purposes. Garda members received no instruction or training on the Dräger device during the

period under examination and it wasn't until April 2016 when HQ.23/16 issued that Garda members were made aware that the Dräger device had the capacity to count breath tests.

4.6 Policy and Targets

Policing plans and priorities are a mechanism employed to deliver policing commitments for the coming year through the use of strategic goal setting. Each year different targets are identified to achieve various policing goals. For example, in roads policing the aim was always the reduction of road deaths and serious injury.

The examination team reviewed these plans to establish if any targets were set in relation to M.A.T./M.I.T. checkpoints and breath tests. From 2006 – 2008 targets were set to increase the number of M.A.T. checkpoints conducted year on year. For example, An Garda Síochána Policing Plan in 2007 set the target to increase M.A.T. checkpoints by 10%.

In more recent years, targets were presented in general terms; that is, no specific reduction was outlined. The overall priority was the reduction in the number of deaths and serious injuries on Irish roads arising from collisions and from pedestrians failing to take appropriate care. This is in line with roads policing priorities in other jurisdictions.

The primary aim of the Government Road Safety Strategy 2013-2020 is to reduce deaths and serious injuries on Irish Roads. The strategy document acknowledged that M.A.T. checkpoints were a successful intervention in improving road safety since 2006. This strategy did not set particular targets in relation to the number of M.A.T. checkpoints and breath tests conducted, but it made a requirement that the Commissioner of An Garda Síochána report on the number of breath tests performed at M.A.T. checkpoints. This is not a requirement in the other jurisdictions visited in the course of this examination.

4.7 Conclusions

The goal of roads policing is to reduce road fatalities and serious injuries. The number of road fatalities reduced when M.A.T. checkpoints were introduced and they act as a significant deterrent against driving while under the influence of alcohol or drugs.

The concept is a simple one, yet the process for Garda members to both conduct and record a M.A.T./M.I.T. checkpoint is laborious. This has been complicated by the volume and range of

data sought when creating such incidents on PULSE. An additional issue was the array of policy documents published over a number of years, each of which added another layer of complication to what should have been a relatively simple process.

The rationale behind much of the data recorded on PULSE during the creation of a M.A.T./M.I.T. checkpoint incident is unclear. It is unfeasible for Garda members to record some of the information currently required on PULSE, with any degree of accuracy, in addition to conducting all other functions at a M.A.T./M.I.T. checkpoint. For example, the total vehicles passing through the checkpoint or the time delay to motorists.

The lack of concise, simple data fields on PULSE and poor policy documents resulted in the misinterpretation of "vehicles stopped and controlled". The purpose of the "vehicles stopped and controlled" field is largely irrelevant as it represents the sum total of the entire breath test/fluid test data recorded on the PUSLE screen directly below it. It represents duplication and serves no purpose other than confusion.

For this reason, it is essential that every data field on PULSE across all category types are easily understood and not open to misinterpretation. There was a need for the M.A.T./M.I.T checkpoint incident fields to be reviewed and any irrelevant data fields or fields open to misinterpretation should be removed. Only data pertinent to M.A.T./M.I.T. checkpoints should be recorded on PULSE. This recommendation is in line with best practice viewed within the Police Service of Northern Ireland, Police Scotland and Essex Police.

5. Dräger

5.1 Overview

The initial focus of this examination was to compare PULSE and M.B.R.S. breath test data. For reasons which will be discussed further in this chapter, the Dräger breath test data is not suitable for direct comparison with breath test data recorded on PULSE[2]. One of the main anomalies is that PULSE can record the exact number of breath tests at a specific date and time whereas the M.B.R.S. data is recorded when a device is submitted for calibration. No information is available on individual Dräger devices to indicate the date and location of when breath tests were recorded between any two calibration dates.

This chapter will outline the role and function of the M.B.R.S and the equipment they supply to An Garda Síochána to conduct roadside breath tests. It will detail the findings of this examination regarding the number of breath tests recorded on Dräger devices between the 7th June 2009 and the 10th April 2017 following the completion of the national return of Dräger device readings and outline the reason why this examination was extended to cover this period. Finally, the supply of mouthpieces since the inception of the Dräger device in 2006 was also examined and the findings in relation to these will be outlined and discussed.

5.2 The Medical Bureau of Road Safety (M.B.R.S.)

Prior to the introduction of breath testing in Ireland, the M.B.R.S. was the sole body responsible for the chemical testing of blood and urine samples, taken from drivers arrested on suspicion of drink driving, for the presence of intoxicants. This is a role that the M.B.R.S. still fulfills, albeit the practice of Gardaí taking these samples has reduced significantly since the inception of the breath test process in 2006.

The M.B.R.S. are responsible for approval, supply and testing of all equipment provided to An Garda Síochána for the purposes of detecting the presence of intoxicants in the breath of suspected drink drivers. The device supplied by the M.B.R.S. to An Garda Síochána to conduct a

[2] For full analysis report refer to Appendix A – Comparing Breath Tests recorded on Drager Devices Vs M.A.T./M.I.T. Checkpoints on PULSE.

roadside breath test is the Dräger 6510 Alcotest. The device is a self-contained unit with a disposable mouthpiece for roadside breath sampling. A plastic mouthpiece is snapped into a receptacle at the top of the unit. These are also supplied to An Garda Síochána by the M.B.R.S. During the breath test process the user exhales into the Dräger device which then detects whether alcohol is present or not. When the unit is ready for use a number appears on the screen to indicate the total number of breath tests recorded on the device. After each breath test the number increases by one, allowing the user to calculate the number of breath tests conducted at the checkpoint by subtracting the reading at the start of the checkpoint from the reading at the end of the checkpoint.

The examination team visited the M.B.R.S. at the U.C.D. Campus in Belfield, Dublin 4 and were afforded every assistance by personnel within this Bureau. The process of Dräger calibration was observed and Dräger data recording explained. The examination team was provided with Dräger breath test figures from 16th March 2006 when recording commenced until 10th April 2017.

5.3 The Calibration Process

Individual Dräger devices are calibrated by the M.B.R.S. The onus rests on An Garda Síochána, at all times, to present Dräger devices to the M.B.R.S. for calibration. It is recommended that each device is submitted for calibration every six months. Once submitted, the Dräger device is checked by a scientist and a paper record of the examination is completed. During the calibration process the M.B.R.S. perform approximately 4-5 breath tests on each device. It is at this stage that the number of breath tests recorded on the device are extracted and manually inputted into a database, which is maintained exclusively by the M.B.R.S.

Until 2008, when an individual Dräger device was handed in for calibration, a swap out system was in operation where a replacement was handed out (this replacement did not necessarily have to be previously allocated/connected to the same District). Since 2008, the same device is returned to the same District/Division after calibration.

When a Dräger device is scheduled for calibration, the device is recorded as *Due* on the M.B.R.S. database. Any device, not calibrated within a 6 month period is categorised as *Overdue*. Dräger devices not calibrated within a 12 month period are categorised as *Inactive* on this database.

Failure to return a device for calibration does not necessarily affect its functionality or impact on its accuracy. Dräger devices may be classified as *Lost*, but this will only occur when a report is received at the M.B.R.S from a Superintendent detailing that a Dräger device allocated to his/her District has been lost.

5.4 Dräger Device Management

There was no consistent national policy governing the operational management of Dräger devices within individual Garda Districts and Stations around the country until an instruction was issued on the 27th May 2015. This outlined that the storage and use of Dräger devices should be recorded and a supervisor should be given charge of the task. Prior to this date, Dräger devices were generally accessible by any member and could be found stored in Garda Stations and/or official Garda vehicles. Typically, one member was assigned responsibility within a Division/District to ensure that Dräger devices were taken to the M.B.R.S. for calibration when due.

5.5 Calculation of Comparable Dräger Breath Test Data

One of the challenges encountered as part of this examination was calculating the overall number of Dräger breath tests over a specific time period to facilitate direct comparison with PULSE data. The original start date for the examination was 1st November 2011. This date was selected as every Dräger in the country was either calibrated or temporarily taken out of use, for calibration, around this time period, to facilitate changes in the Road Traffic Legislation which lowered the drink drive limits for specified categories of drivers. Each individual Dräger device had to be reprogrammed to take account of this change and each was calibrated as part of this process.

Originally, the 31st October 2016 had been chosen as the end date. Following examination, there was some concern regarding the manner in which breath test data was included/excluded around this end date. The suspicion was that there were, potentially, a number of breath tests conducted within the period which had not been included in the overall Dräger count reading. It should be emphasised that these excluded breath tests would not amount to the 937,212 additional breath tests recorded on PULSE. However, it was still considered important to establish what this discrepancy was, when a more accurate Dräger count was used in the calculation.

In order to ascertain the current number of breath tests recorded nationally on all Dräger devices within An Garda Síochána, the examination team sought a national return in respect of all readings from devices in use throughout all Garda stations. An instruction was disseminated, via Regional Offices, directing that a reading was to be taken from each individual Dräger device, held within that Region, on the 10th of April 2017. The majority of Garda Divisions submitted their readings from Dräger devices over the weekend of 8th-9th April, with a small number of Divisions responding shortly thereafter. In addition to obtaining the latest reading for each Dräger device in use, the status of each machine was established, as set out in **Table 2**.

Table 2: Dräger devices by Status

Status	No. of devices	% of total	% cumulative
Drägers for which the Divisions supplied a reading in April 2017	950	60%	60%
Drägers awaiting calibration at MBRS on 12 April 2017, for which the Divisions did not supply a reading	9	1%	60%
Drägers for which the Divisions did not supply a reading but which were calibrated by MBRS in 2017	100	6%	67%
Lost/missing	346	22%	89%
Broken/beyond economic repair	111	7%	96%
Inactive/never issued to a station/stock	9	1%	96%
Other (not currently at the station, not accessible, reading was not returned by the Division and no reason stated)	61	4%	100%
Total	**1,586**	**100%**	**100%**

Initially it was the intention of this examination to compare the entire number of breath tests recorded on the Dräger devices since 16th March 2006 with the numbers of breath tests recorded on PULSE since this date. However, it was then established that An Garda Síochána did not actually begin recording specific M.A.T. incidents on PULSE until 7th June 2009. It was for this reason that the 7th June 2009 was selected as the commencement date for comparison purposes.

While it was relatively simple to extract PULSE breath test data for a specific time period, this, as already stated, was not the case with Dräger breath test data. The examination team had to exclude Dräger data recorded before 7th June 2009 in order to be able to compare Dräger and PULSE figures over the same time period, which is 7th June 2009 – 10th April 2017.[3]

[3] For full analysis report refer to Appendix A – Comparing Breath Tests recorded on Drager Devices Vs M.A.T./M.I.T. Checkpoints on PULSE.

The process of excluding Dräger data collected before 7th June 2009 from the overall Dräger breath test count was time consuming and involved estimation. The overall number of breath tests recorded on Dräger devices between the 7th June 2009 – 10th April 2017 was calculated to be **2,040,179.** This figure excludes breath tests due to calibration and breath tests collected as part of training or internally by M.B.R.S. This figure is somewhat lower than the actual number of breath tests recorded on the Dräger devices. This is because the Divisions were unable to supply readings in respect of all the devices in use and hence the latest M.B.R.S. reading was used for these, which in some cases was quite out of date. Thus the Dräger figure should be treated with some caution, acknowledging the challenges and limitations of the calculation process outlined in Appendix A.

5.6 Dräger Mouthpieces

Dräger mouthpieces are the plastic tubes, attached to the top of the Dräger Alcotest 6510, through which motorists exhale to register a reading on the device. Each mouthpiece is individually wrapped in sealed plastic for hygiene purposes. The instruction in relation to mouthpieces is that one is used for each individual motorist and discarded immediately thereafter. An important part of this examination was to determine whether sufficient mouthpieces existed to carry out the number of breath tests recorded on the M.B.R.S. Dräger database.

Due to the consumable nature of mouthpieces, it was necessary to determine the total number of mouthpieces issued to An Garda Síochána since the introduction of M.A.T. checkpoints in 2006 until April 2017 and compare it to the cumulative number of breath tests recorded on Dräger devices and the number of breath tests recorded on PULSE in so far as possible.

This was also relevant, as there had been two separate allegations that individual members of An Garda Síochána were observed using one mouthpiece, while exhaling into Dräger devices a number of times to intentionally inflate breath test numbers thereon. One allegation was made anonymously by a Reserve Garda; another remains subject to an ongoing investigation outside of this enquiry.

The M.B.R.S. supply An Garda Síochána with mouthpieces, the Central Stores in Santry Garda station are responsible for the allocation of mouthpieces to individual Garda Districts nationwide.

The examination team determined from Garda Procurement that between 2006 and 2017 the following number of mouthpieces were received by An Garda Síochána and issued to Garda Districts around the country:

- **Total Mouthpieces Purchased/Received: 3,860,000**
- **Total Mouthpieces Issued: 3,583,200**

5.7 National Mouthpiece Return

As will become clear in Chapter 6, there were insufficient mouthpieces issued to carry out the number of breath tests recorded on PULSE. However, it was considered important to determine whether the number of mouthpieces issued was sufficient to conduct the number of breath tests recorded nationally by Dräger devices.

Having determined the overall number of mouthpieces issued since 2006, the examination team sought to establish the number of unused mouthpieces held in storage throughout the organisation. A return was requested from each Garda Division detailing how many mouthpieces were currently in stock in April 2017. This return indicated that 290,930 mouthpieces were in stock throughout the Divisions. Since the inception of M.A.T. checkpoints in 2006, **3,292,270** mouthpieces had been utilised.

This indicates that there has been a sufficient number of mouthpieces issued, to conduct the number of breath tests recorded on the Dräger device database. This examination has identified Divisional anomalies in relation to mouthpiece data. However, due to movement of mouthpieces following their issuance, this data is not reliable. It would be akin to trying to trace pens, or similar consumables, issued to stations as they permeate throughout the organisation to individual members.

Table 3: Dräger Breath Tests compared with number of Mouthpieces Used

2006 – 2017 Dräger Breath Tests compared with Mouthpieces	
Total number of Breath Tests recorded on Dräger Devices	3,227,122
Total number of Mouthpieces used by An Garda Síochána	3,292,270

5.8 Conclusions

In order to identify the cause (s) of the discrepancy between the number of breath tests recorded on Drägers and PULSE, this examination considered that it was important to establish the exact scale of the anomaly. As breath test recording on PULSE and Dräger did not start at the same time, it was necessary to exclude Dräger data collected before 7th June 2009 to enable comparison with PULSE. Achieving this was not a simple process and resulted in a significant body of work to compile accurate data. The cumulative number of breath tests recorded on Dräger devices during this time period has been calculated to be 2,040,179 (excluding calibration breath tests) and it is this number which was subject to a comparison against the number of breath tests recorded on PULSE during the period outlined.

An examination was also conducted into the number of mouthpieces used by An Garda Síochána since the inception of M.A.T. checkpoints in 2006. The results indicate that there was a sufficient number of mouthpieces to conduct the number of breath tests as recorded on Dräger devices. The only mouthpiece number that this examination process can place any reliance upon is the National figure. Thereafter, it is not possible to apply any degree of accuracy to the movement of mouthpieces between stations and units at front line level.

6. PULSE Breath Test Data

6.1 Overview

As outlined in previous chapters, the ability to record M.A.T. checkpoints on PULSE did not correspond to the introduction of the M.A.T. checkpoint process itself. It was not until 7th June 2009 that members of An Garda Síochána began recording these checkpoints under a designated Traffic Incident category on PULSE. During the incident creation process, breath test fields are populated along with an array of other statistical data. This chapter sets out the numerical data contained on the PULSE system in relation to breath tests conducted between the commencement date outlined above and the 10th April 2017, a time period which correlates directly with Dräger data gathered during the national return.

6.2 PULSE Breath Test Data compared to National Dräger Return

Once the National Dräger return was completed the examination team extracted the breath test figures from PULSE for all M.A.T./M.I.T. checkpoints which occurred between 7th June 2009 and 10th April 2017. The results revealed that PULSE had an extra **1,458,221 million breath tests** when compared against the Dräger devices – see **Table 4.**

Table 4: Comparison of Breath Test Data between 07/06/09 – 10/04/17

	No. of breath tests on Dräger devices	No. of breath tests on PULSE MAT/MIT checkpoints	Difference
Total	**2,040,179**	**3,498,400**	**1,458,221**

It must be emphasised that the over recording of **1,458,221 breath tests on PULSE solely relates to the breath tests recorded on M.A.T./M.I.T. checkpoint incidents**. Whilst the breath tests recorded on such incidents represent the vast majority of those that are conducted, there are other circumstances when a breath test may be conducted and these are not included as they cannot be accurately quantified. This is primarily because some breath tests are contained within other incident types on PULSE. The Road Traffic Act 2010 allowed for the taking of a breath specimen in circumstances, other than at a M.A.T. checkpoint. For example it authorises a member of An Garda Síochána to take a breath specimen from a driver who has been involved in a road traffic

collision or in circumstances where a driver has committed a minor road traffic offence. Breath tests conducted in such circumstances might not, necessarily be recorded on PULSE.

In an attempt to quantify the number of such breath tests, a search was conducted across incident types on PULSE that may have recorded breath tests other than those recorded at M.A.T./M.I.T. checkpoints. This was done by conducting a key word search that may have been used to describe that a breath tests was conducted. In total 14,580 incidents were returned.

Due to the volume of incidents returned it was not feasible to examine each individually to determine the exact number of breath tests conducted. Based on a review of a proportion of the incidents it was found that in some cases the narrative merely stated that a breath test was not conducted, whilst in other incidents one or more breath tests were conducted. In essence, the number of breath tests conducted outside of M.A.T/M.I.T. checkpoint incidents cannot be accurately quantified. Based on these findings it indicates that the number of breath tests conducted outside of M.A.T./M.I.T. checkpoints is relatively low in comparison to the total.

In an attempt to identify trends, the examination team looked at the yearly breakdown of the number of M.A.T./M.I.T. checkpoints and the number of breath tests conducted. **See Table 5.** The data was contrasted against the duration of the average checkpoint and the overall manpower at Garda rank for each year. The yearly breakdown clearly shows that the number of checkpoints conducted increased over the years whilst the number of breath tests decreased. In 2010, the number of recorded breath tests was nearly twice as high as in 2015 when the lowest annual figure over the period was recorded (568,573 in 2010 compared to 332,080 in 2016). The number of breath tests recorded in 2016 increased but was still 40% lower when compared to 2010.

Table 5: Number of M.A.T./M.I.T. Checkpoints, Breath Tests and Checkpoint Duration 07/06/2009 – 10/04/2017

Year	No. of checkpoints [2]	Sum of negative and positive breath tests	Breath tests per checkpoint	Average checkpoint duration (min)[3]	Personnel of Garda rank[4]
2009[1]	21,805	286,507	13	32	10,543
2010	54,320	568,573	10	31	10,346
2011	67,090	543,347	8	30	10,072
2012	67,851	472,170	7	29	9,815
2013	73,826	446,379	6	28	9,546
2014	72,486	404,632	6	27	9,164
2015	70,834	332,080	5	26	9,175
2016	72,629	338,539	5	26	9,101
2017[1]	22,357	106,173	5	26	N/A
Total	**523,198**	**3,498,400**	**7[5]**	**28[5]**	**9,720[5]**

[1] *Does not include full year. M.A.T./M.I.T. checkpoints started officially being recorded on PULSE from 7 June 2009. 2017 includes M.A.T./M.I.T. checkpoints up to 10 April.*
[2] *Does not include checkpoints where the number of vehicles through a checkpoint, the number of vehicles stopped and controlled and the sum of negative, positive and failed/refused breath tests were equal to zero. These checkpoints are most likely invalid and perhaps hadn't been invalidated on PULSE (n=27,011).*
[3] *Excludes checkpoints where the duration is 2 hours or longer (n=3,886).*
[4] *Excludes DMR Office and Headquarters Staff..*
[5] *Average across the years.*

While the number of breath tests recorded in 2016 was 40% lower compared to 2010, the number of M.A.T./M.I.T. checkpoints conducted, on the other hand, increased by 34% over the same period, from 54,320 to 72,629. In 2010, the average length of the checkpoint was 31 minutes versus 26 minutes in 2016.

6.3 Conclusions

Between the 7th June 2009 and the 10th April 2017, there were 1,458,221 million more breath tests recorded on PULSE when compared to the number calculated on the Dräger devices. It is notable that the overall number of breath tests recorded on PULSE reduced significantly on a yearly basis, while the number of M.A.T./M.I.T. checkpoints increased. This paradoxical M.A.T./M.I.T. checkpoint versus breath test trend over the years is somewhat surprising. The checkpoint duration time reduction could, at least to some extent, explain this pattern. However, whether this is the sole contributor to this decrease/increase cannot be determined with any degree of certainty without further, more detailed examination.

7. Resourcing and Supervision

7.1 Overview

The period of time which was subject of this examination corresponded with significant austerity and curtailment of investment in every element of public service provision, including An Garda Síochána. In conjunction with a cut in annual budgetary provision, An Garda Síochána was subjected to a recruitment and promotion moratorium which resulted in a reduced number of Garda members including first and second line supervisory personnel.

The service model of An Garda Síochána is heavily dependent on human resources. This examination sought to quantify this reduction, taking cognisance of the fact that a personnel roster change was implemented in 2012. The examination team obtained a yearly breakdown of the personnel figures from 2009 to 2016 from Human Resources at Garda Headquarters. This information was current as of March 2017.

7.2 Percentage Change in the Ranks Nationwide, 2009 – 2016

The data was analysed first to determine the percentage decrease in the number of Inspectors, Sergeants and Gardaí from 2009 – 2016 nationwide. The findings are outlined in **Table 6**.

Table 6: Percentage change in the Ranks Nationwide 2009 - 2016

	INSPECTOR	SERGEANT	GARDA
Decrease in the number of Personnel	-9	-134	-1,462
Percentage Decrease	-3%	-6%	-12%

7.3 Yearly Breakdown and Percentage Change per year from 2009 – 2016

The data was then analysed to determine the yearly breakdown of all personnel at the rank of Inspector, Sergeant and Garda across the six regions and Garda Headquarters between 2009 - 2016 **(Table 7).** There was a consistent decrease in Inspector, Sergeant and Garda numbers across all Regions and Garda Headquarters. The decrease is especially notable in the Dublin Region (-17%) and Northern Region (-13%).

Table 7: Yearly Breakdown of Personnel and Percentage Change from 2009 – 2016

Region overall totals	2009	2010	2011	2012	2013	2014	2015	2016	% Change
Dublin	4,439	4,357	4,180	4,016	3,876	3,725	3,654	3,670	**-17%**
Eastern	1,559	1,551	1,500	1,473	1,437	1,404	1,408	1,423	**-9%**
South Eastern	1,280	1,259	1,223	1,190	1,165	1,145	1,156	1,172	**-8%**
Southern	2,255	2,271	2,235	2,161	2,117	2,070	2,053	2,056	**-9%**
Western	1,511	1,507	1,472	1,431	1,435	1,420	1,426	1,440	**-5%**
Northern	1,473	1,468	1,400	1,349	1,311	1,278	1,271	1,279	**-13%**
Headquarters	1,810	1,737	1,688	1,598	1,551	1,569	1,638	1,682	**-7%**

7.4 Change of Rosters – April 2012

In April 2012, the Garda rosters were changed from 4 units to 5 units. The duration of the tour of duty was increased from 8 to 10 hours, with a 10 day shift pattern consisting of 6 days on duty and 4 days off duty over a 10 week period. The premise for the change was to create a crossover of units during times when policing services were most in demand (that is, Friday and Saturday nights).

This roster change had the effect of increasing the numbers of Gardaí available on crossover shifts while it significantly reduced the number of Gardaí available at all other times. The roster change meant that many units were reduced to only one supervisory Sergeant. If a crossover unit Sergeant was unavailable or on leave, the operational impact was that a greater supervisory burden was then placed on whatever Sergeant was actually working at that time. This often resulted in Gardaí working largely unsupervised at peak times.

7.5 Impact on Supervision and Strategy

The reduction in front-line supervision and its impact is referenced by the Association of Garda Sergeant and Inspectors (A.G.S.I) in their submission to this examination. Their contention was that reduced supervisor numbers during the years 2008-2013 (confirmed by data provided by Garda Human Resources) impacted upon the capability of Sergeants and Inspectors to carry out outdoor duties.

At Executive level in An Garda Síochána, there was no dedicated Assistant Commissioner allocated to G.N.T.B. for much of the period June 2008 – January 2017. In this same period, seven different Chief Superintendents held the position of Chief Superintendent in charge of G.N.T.B. Some of the officers were also covering other equally challenging full time portfolios at the same time. The position of Superintendent (Operations) in G.N.T.B. remained vacant for most of the period in question. In June 2017 this position was recently filled.

7.6 Conclusion

During the period 2009 – 2016 there was a significant reduction in manpower at the rank of Inspector, Sergeant and Garda. This was primarily due to the embargo on recruitment and declining Garda numbers due to an increase in retirements. The decrease was most significant in the Dublin and Northern Regions.

The reduction in the number of Gardaí and Sergeants during this time period was substantial and further exacerbated by the creation of a fifth working unit that stretched finite resources particularly in terms of first-line supervision capacity. In essence, the change to the 5 unit rosters combined with the recruitment embargo resulted in less Gardaí, Sergeants and Inspectors being attached to each unit and directly impacted on the ability of Sergeants and Inspectors to adequately supervise personnel.

This reduction in personnel also affected senior management positions, which in turn, impacted upon the organisation's capacity to provide strategic direction and maintain governance structures. The risk posed to the overall governance of the organisation by the adhoc approach to filling critical posts has been highlighted by the Garda Commissioner. There are particular risks associated when Officers are tasked with managing several busy portfolios, and are effectively "dipping" in and out of critical areas. This is the situation which evolved during the period under review, when there was no promotion and/or career opportunities.

8. Analysis

8.1 Overview

The comparison of breath tests recorded on the Dräger devices versus PULSE revealed a difference of 1,458,221 breath tests. A number of analyses were undertaken to try to explain this disparity. Initially, explorative analysis was conducted, which allowed the examination team to become familiar with M.A.T./M.I.T. checkpoint incidents on PULSE. During this phase, recording errors and incidents with questionably high breath test figures were observed. This prompted a more detailed examination of the issues identified in order to gain a better understanding of how they may have contributed to the disparity between the number of breath tests recorded on Drägers versus PULSE.

Several quantitative analyses were conducted, the results of which identified recording errors and potential over-recording of breath tests at M.A.T./M.I.T checkpoints recorded on PULSE. In addition, breath test figures among the 28 Garda Divisions were examined with a view to identifying trends or abnormalities that could further explain how, where and why the disparities in breath test figures occurred. This chapter discusses the analyses conducted and provides an overview of the findings.

8.2 Random Sampling (recording errors and questionable breath test data)

To estimate the scale of the recording error and identify checkpoints with potentially inflated breath tests, a random sample of 2,136 checkpoint incidents were examined. This was the sample size required in order to generalise the findings from the sample to the entire number 502,730 M.A.T./M.I.T. checkpoints recorded on PULSE between 1st July 2010 and 10th April 2017, applying a 95% confidence interval and 3% margin of error.[4] This period was selected to coincide with the 7 year period during which G.I.S.C. retain incident voice recordings.

[4] The margin of error measures the maximum amount by which the sample results are expected to differ from those of the actual population. In this case, it measures the difference between the level of recording error and over-recording of breath tests on M.A.T./M.I.T. checkpoints in the sample versus M.A.T./M.I.T. checkpoints in the sampling frame.

A 95% confidence interval is the most commonly used interval. It tells how confident one can be about their sample estimates. That is, if the same method to select different samples of M.A.T./M.I.T. checkpoints and then computed a proportion of incorrectly recorded checkpoints for each sample, we would expect the true proportion to fall within the interval estimates 95% of the time.

All of the 2,136 checkpoint incidents were manually examined. Any incident where the following errors were present were coded as having a recording error:

1. The number of vehicles through a checkpoint was equal to the number of "vehicles stopped and controlled", when the pre-determined method of selecting motorists specified at the outset was a random design. Random design means that vehicles should be stopped at random and tested. If every vehicle is tested, the random method was not applied and so it is incorrect. This rule was only applied to the checkpoints with 4 or more vehicles passing through a checkpoint. Where the number of vehicles through a checkpoint was 3 or fewer, the incident was coded as correct, as the number of vehicles was perhaps too small to be stopped at random.
2. The pre-determined order of vehicle selection was to stop every vehicle. However, the number of vehicles through a checkpoint was different to the number of "vehicles stopped and controlled".
3. The number of "vehicles stopped and controlled" was higher than the number through a checkpoint.
4. Typographical error in the negative/positive/failed/refused breath test boxes - extra zero. By default, fields for roadside breath tests under the "MAT/MIT statistics" tab on PULSE have zeros pre-filled. For example, the number of "vehicles stopped and controlled" is 5 and the number of negative breath tests is 50.
5. The incident should have been invalidated as the checkpoint hadn't been conducted for various reasons.
6. A checkpoint was conducted but no figures were entered on PULSE under the "MIT statistics" tab.
7. Figures in the narrative did not match those recorded under the "MIT statistics" tab.
8. Other reasons (vehicles through a checkpoint or "vehicles stopped and controlled" box was not filled in, vehicle selection method not stated, authorised by field details not filled in, or Dräger count not recorded in the designated location).

Simultaneously, all of the incidents were checked for inflation. A formulaic approach was adopted for this purpose taking into account the duration of the checkpoint and the number of Garda personnel present. In order to implement this approach, the examination team tasked an experienced Traffic Sergeant to calculate how long it takes, on average, for a breath test to be

conducted during a checkpoint. He reported that, on average, the entire process of taking a breath test during a checkpoint lasted 5 minutes (that is, from the time the vehicle was stopped, spoken to by the member, documents inspected, the test conducted and the result examined), while the actual breath test (that is, exhaling into the Dräger device) ranged between 37 and 96 seconds.

The examination team took a more conservative estimate of 4 minutes, on average, to complete the entire process of taking a breath test in order to identify potentially inflated breath tests. Each checkpoint was then analysed using a mathematical formula to determine if the number of breath tests recorded could have been conducted by the number of personnel present within the duration of the checkpoint (Based on the conservative estimate that the process of conducting a breath test at a checkpoint takes 4 minutes).

8.2.1 Random Sample Findings

Based on the analysis of the random sample, **10% of checkpoints had recording errors.** This translates to between 7% and 13% of all M.A.T/M.I.T. checkpoint incidents recorded on PULSE between the 1st July 2010 and 10th April 2017 are estimated to have recording errors, based on a 95% confidence interval and 3% margin of error. This equates to between **35,191** and **65,355** checkpoints. **Table 8** shows the percentage value attributed to each type of recording error[5].

Table 8: Breakdown of the Recording Errors in Random Sample

Breakdown of the Recording Errors in Random Sample	Overall
Number of vehicles through a checkpoint equals "vehicles stopped and controlled", when random design specified at the outset	68%
Checkpoint should have been invalidated	13%
Figures in the narrative don't match those under the "MIT statistics" tab	7%
Checkpoint conducted - no figures entered under the "MIT statistics" tab	6%
Number of "vehicles stopped and controlled" higher than "vehicles through a checkpoint"	2%
Random vehicles stopped when every vehicle to be stopped specified at the outset	1%
Other*	3%
Base (weighted)	**208**

**Other category includes vehicles through a checkpoint or "vehicles stopped and controlled" field not filled in, vehicle selection method not stated, authorised by tab details not filled in, Dräger count not recorded in the designated location, and typo in the breath test fields - extra zero reasons.*

[5] For full analysis report refer to Appendix B – Measuring the Recording Error and Over-Recording of Breath Tests on M.A.T./M.I.T. checkpoints on PULSE.

Random sampling also revealed that **6%** of the 2,136 M.A.T./M.I.T checkpoints had **inflated breath tests** based on the 4 minute assumption. This equates to 150 incidents with 1,056 breath tests over the expected number, or, on average, 7.04 extra breath tests per checkpoint. When applied to the entire sampling frame, between **3% and 9%** of incidents are estimated to **inflate breath tests**. This equates to between **15,082** and **45,246** checkpoints. Thus between **106,177 and 318,530** breath tests recorded on PULSE between the 1st July 2010 and 10th April 2017 are potentially inflated.

It is important to note that figures quoted for the recording errors and inflation are not mutually exclusive.

8.3 Examination of M.A.T./M.I.T. Checkpoint Incidents with 50+ Breath Tests

Following the finding that between 3% and 9% of M.A.T./M.I.T. checkpoints on PULSE are estimated to inflate the number of breath tests based on the 4 minute per breath test assumption, further analysis was conducted on M.A.T./M.I.T. checkpoints which had 50 or more breath tests recorded over the examination period. Again, the examination team used the 4 minute assumption in this analysis. In total, 3,971 checkpoints were identified which contained breath tests greater than or equal to 50. Of these, 1,984 (50%) had inflated breath tests. This equates to **68,694** breath tests being inflated based on the 4 minute assumption.

8.4 Other Issues and Analyses

Other recording issues were examined to identify the factors that led to the difference between Dräger and PULSE figures, including issues in relation to the confusion over the "vehicles stopped and controlled" field; the pre-entry of zero in breath test fields and the rounding/estimating of breath test figures.

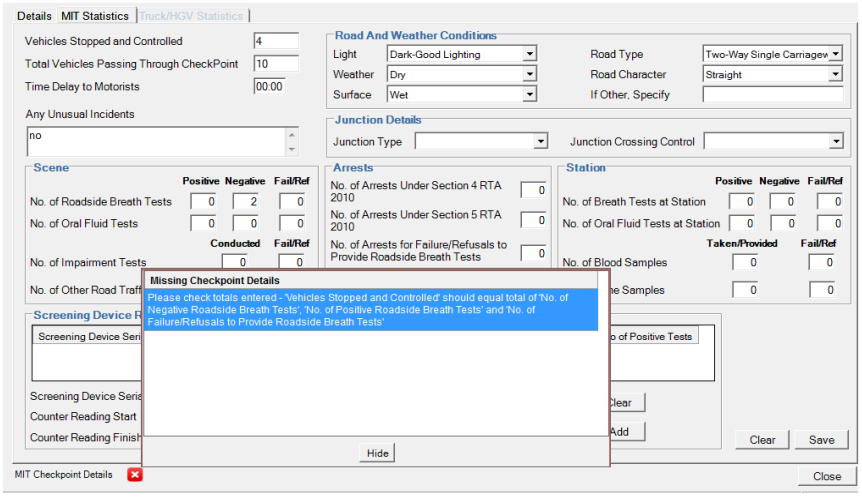
8.4.1 "Vehicles Stopped and Controlled" Issue

In April 2017, having completed the explorative analysis, the examination team conducted the first of two field visits to G.I.S.C. During this visit it emerged that G.I.S.C. staff, when entering checkpoint information on PULSE, were applying the rule that the number of "vehicles stopped

and controlled" equated to the sum of negative, positive and failed or refused breath tests. According to G.I.S.C., they were provided with this definition in November 2012. The "vehicles stopped and controlled" field was, by its title, open to interpretation. It appeared from the review of policy that Garda members were not provided with the definition of this field until April 2016. Regardless of this issue, based on the feedback received as part of this examination, it was clear that some Garda members interpreted this field to mean, literally, **all** "vehicles stopped or controlled" during the checkpoint for any purpose, including, but not exclusive, to those stopped and breath tested, for example, stopping a vehicle with no tax displayed.

Thus, it became apparent that G.I.S.C. were sending back incidents to Garda members for review if the number of "vehicles stopped and controlled" did not equal the sum of breath tests, including those failed or refused. It later transpired that these reviews were automated as part of the systematic review of all M.A.T./M.I.T. checkpoint incidents rolled out on the 17th April 2016. See **Figure 5**.

Figure 5: Review/Clarification (Vehicle Stopped and Controlled)



The incident in **Figure 5** was marked for review/clarification because the number of breath tests, 2, did not equal the number of "vehicles stopped and controlled", 4. In order for the incident to be closed the Garda member had to match the numbers in the two fields. In order to do so they either would have had to reduce the number of "vehicles stopped and controlled" by 2, or increase the number of breath tests by 2. It was hypothesized that Garda members, upon receipt of this notification, may have adjusted the number of breath tests to satisfy this requirement.

In order to establish if applying this rule may have inflated breath test figures on PULSE, particularly negative breath tests, a sample of M.A.T./M.I.T. checkpoint incidents that were subject to a review were examined from the first six months of 2012.[6] In total, there were 36,670 checkpoint incidents examined. The findings indicated that 19% of the sample did not comply with the rule but only in about 2% of cases the figures were altered to match the figures in the "vehicles stopped and controlled" and breath test fields. In most instances, the "vehicles stopped and controlled" figure was reduced to match the number of breath tests rather than the other way around. Breath tests increased marginally, by 0.42%, as a result of applying this rule. That is, an **additional 1,026 breath tests were** recorded on PULSE, as a result of applying the rule that the number of "vehicles stopped and controlled" should equate to the number of breath tests conducted.

Following this analysis, compliance with the rule across the entire number of M.A.T./M.I.T. checkpoints was examined on a yearly basis from 25th July 2010, when the "vehicles stopped and controlled" field was added to PULSE, until the 10th April 2017. See **Table 9**

Table 9: Compliance with the rule that the number of "vehicles stopped and controlled" should equal the sum of negative, positive and failed/refused breath tests, 2010-2017

Year	2010*	2011	2012	2013	2014	2015	2016	2017*	Total
Proportion of checkpoints that comply with the rule	78%	81%	87%	98%	98%	99%	100%	99%	**93%**

**2010 starts from 25 July, as this is when "vehicles stopped and controlled" field came in; 2017 goes as far as 10th April.*

Table 9 indicates that the vast majority of incidents complied with the rule, especially after 2012, when G.I.S.C. personnel were provided with a manual which outlined the definition of "vehicles stopped and controlled".

The examination team had concerns over the impact that this instruction may have had on the recording of breath test figures during the incident creation process. In the six month sample of incidents examined, there was only a marginal increase in the number of breath tests as a result of applying the rule. However, during the second on-site visit to G.I.S.C. (discussed in chapter 8.5) the examination team listened to a sample of call recordings, and it became evident that applying this rule might have affected the accuracy of breath test data on PULSE.

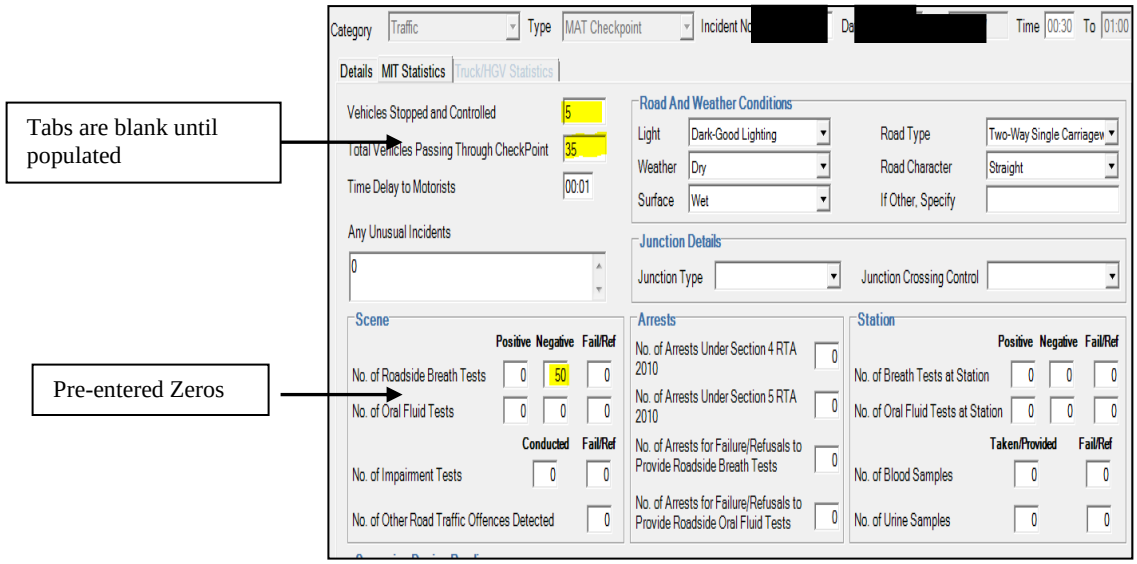
[6] For full analysis report refer to Appendix C - The Impact of GISC's MAT/MIT checkpoint recording practices on the number of breath tests recorded on PULSE

During some calls G.I.S.C. call takers didn't specifically ask Garda members for the number of breath tests they had conducted. They only asked for the number of vehicles they had stopped and controlled, and if all breath tests had been negative. Once the call taker established that all breath tests had been negative, they then recorded the number of negative breath tests by using the number of "vehicles stopped and controlled" they had been given earlier. However, the Garda member may have had a different interpretation of what "vehicles stopped and controlled" meant. Failure to ask about the number of motorists that had been breath tested, and presuming that the number of "vehicles stopped and controlled" was the same as the number of negative breath tests might have led to the inflation of negative breath tests on PULSE at the point of data entry, which cannot be detected just by looking at the data.

8.4.2 Pre-Entry of Zero in Data Fields

Another issue discovered was the fact that breath test data fields under the M.A.T./M.I.T. statistics tab on PULSE were pre-populated with a zero, when the remaining fields under this tab were not. It emerged that in some instances the number of breath tests recorded was essentially being multiplied by ten as a result of the pre-populated zeros not being deleted prior to inputting the data. An example of this can be seen in **Figure 6**. In this instance, the number of breath tests conducted was 5. However, 50 were recorded in the negative breath test field. It is clear this was an error as there were only 35 vehicles passing through the checkpoint.

Figure 6: Screenshot of Zero Issue



In total, 61 checkpoints were affected across the entire number of M.A.T./M.I.T. checkpoints recorded on PULSE over the investigation period. The sum of negative breath tests for these 61 checkpoints should have been 392 but was recorded as 3,920. In other words, the total number of incorrect breath tests recorded as a result of the pre-populated zeros in the breath test fields was **3,528 breath tests**.

8.4.3 Rounding/Estimating of Breath Test Data

Another factor that was considered during the analysis was the possibility that Garda members may have provided estimated figures to G.I.S.C. call takers during the incident creation. This hypothesis was validated when the examination team reviewed and listened to incident creation call recordings retained by G.I.S.C.

In an attempt to quantify the scale of this issue, all M.A.T./M.I.T. checkpoints recorded on PULSE over the period of examination were analysed, and checkpoints where the figures for the "vehicles stopped and controlled", "vehicles through a checkpoint" and the sum of breath tests, including failed and refused, looked as if they had been estimated identified. For example, checkpoints where the number of "vehicles stopped and controlled" was 40, number of vehicles through a checkpoint was 50, and, the total number of breath tests was 40, were hypothesised to be estimates/potentially rounded. That is, it was assumed that estimated or rounded numbers

would primarily consist of numbers such as 10, 20, 30 etc. In total 29,558 checkpoints out of 523,198 (6%) contained breath test figures which fit this "rounded" profile.

This analysis was conducted to establish whether there was widespread "rounding" of figures, which might merit further examination. However, the identified number of checkpoints was relatively small. Moreover, it is difficult to place any particular reliance on the statistics quoted above without listening to the corresponding call recordings at G.I.S.C.

8.5 G.I.S.C. Field Work

In June 2017, the examination team conducted a second field visit to G.I.S.C. with a view to verifying the issues identified during the course of the various statistical analyses completed, and, identifying any other factors that may have led to the inaccurate recording of breath test data. The examination team reviewed and listened to a total of 89 telephone call recordings. These were selected from the analyses conducted and represented a cross-section of issues.

The telephone calls validated the issues that have been highlighted within this chapter. For example, in the case of the pre-entered zero issue, the Garda member could be heard providing the number of breath tests; however, the zero in the breath test field was never deleted so the number recorded was then multiplied by 10. That is, 5 vehicles were breath tested and 50 were recorded in the breath test field.

While listening to the incident creation telephone calls, it was apparent that Garda members placed little emphasis on the accuracy of the numerical data sought in relation to M.A.T./M.I.T. checkpoints, except when outlining details related to the detection of an offence. In approximately 25% of the calls listened to, Garda members openly estimated the breath test figures they provided; these were accepted and inputted by G.I.S.C. personnel. Generally, Garda members failed to attribute sufficient significance to data accuracy when generating M.A.T./M.I.T. checkpoint incidents.

The "vehicles stopped and controlled" issue has been well documented throughout this report through the review of policy, the initial field work in G.I.S.C. and the related analysis of incidents on PULSE. Although there was only a marginal increase in the number of breath tests recorded in

respect of incidents that were returned to Garda members to amend, this did not account for any breath tests that may have been increased during incident creation process. The sample of telephone calls reviewed at G.I.S.C. provided an example of how this field was open to interpretation and how the numerical data was estimated.

Call Taker	***Number of vehicles stopped and controlled*?**
Garda	*Is that the number of vehicles through the checkpoint or number of vehicles breath tested?*
Call Taker	***Well the way I reckon***
Garda	*I reckon it's stopped and breathalysed is it*?
Call Taker	***Even if they are not breathalysed, if you stop them and stick your head in the window, aren't they controlled, that's my thinking on it.***
Garda	*We will go with you……..Ah 120 went through.....*
Call Taker	***How many negative breath tests?***
Garda	*30 and 30 sixty ah 80, 90 we will say*

During this call, both the call taker and the Garda member were unsure of the meaning of "vehicles stopped and controlled". The Garda member was then heard openly guessing all of the numerical data provided.

Another call clearly showed how the interpretation of the "vehicles stopped and controlled" field could have contributed to the inflation of breath tests on PULSE. During this call, the Garda stated that he had stopped and controlled 149 vehicles. The member was never asked about breath tests but 149 breath tests were recorded. The assumption was that the call taker took the number of "vehicles stopped and controlled" to equal the number of breath tests.

This demonstrates that in the absence of the field definition until April 2016, Garda members may have interpreted the "vehicles stopped and controlled" field in different ways. In some cases Garda members applied its literal meaning, that it was all "vehicles stopped and controlled", including but not exclusive to those that were breath tested. If G.I.S.C. then equated these figures to the number of negative breath tests without asking the member how many negative breath tests they had actually conducted, this would have resulted in the inflation of breath tests on PULSE.

It is not clear what the scale of this problem is. However, it certainly is an issue for at least some of the M.A.T./M.I.T. checkpoints recorded on PULSE.

8.6 Divisional Comparison

Recording errors and over-recording of breath tests on M.A.T./M.I.T. checkpoints to some extent could explain the 1,458,221 gap between the number of breath tests recorded on PULSE compared to Drägers to some extent. However, they were not the only factors that might have led to this gap. It was important to investigate if the disparities between the Dräger and PULSE figures were similar across the 28 Garda Divisions, or if there were certain Divisions where these gaps were more pronounced.

Table 10 shows that 10 of the 28 Divisions had a disparity between Dräger and PULSE figures of over 100%. The biggest difference was observed in Tipperary (385%), followed by DMR West (373% - figure inclusive of Regional Traffic) and Meath (315%). Regionally, the biggest disparity was in the South East (142%). Three out of four Divisions in the South East had a discrepancy of more than 100%, with Wexford being the better performing Division with a disparity of 18%.

Table 10: Divisional Comparison, 7th June 2009 – 10th April 2017

Region/Division	Av. No. of Garda rank[1]	No. of MAT/MIT chk. on PULSE[2]	Av. chk. duration (min)[3]	Av. No. of chk. per person	Av. No. of breath tests (PULSE) per chk.	No. of breath tests -Dräger	No. of breath tests MAT/MIT chk. - PULSE	Diff between breath tests: Dräger vs. PULSE	% of the total difference between Dräger & PULSE[4]
Dublin Region	**3,343***	**37,376**	**38**	**11**	**19**	**493,645**	**727,787**	**47%**	**16%**
D.M.R. Eastern	356	3,400	49	10	27	54,330	92,705	71%	3%
D.M.R. North Central	539	4,262	34	8	18	36,752	74,596	103%	3%
D.M.R. Northern	623	7,192	34	12	15	54,692	110,187	101%	4%
D.M.R. South Central	594	4,170	41	7	36	112,055	150,133	34%	3%
D.M.R. Southern	490	4,973	45	10	26	108,431	127,339	17%	1%
D.M.R. Western	625	13,379	36	21	13	36,527	172,827	373%	9%
D.M.R. Traffic[5]	117					90,853	219,092	141%	
Garda Mounted Unit[5]						5			
Eastern Region	**1,228***	**56,646**	**29**	**46**	**10**	**266,526**	**542,551**	**104%**	**19%**
Kildare	263	12,703	29	48	13	75,059	168,851	125%	6%
Laois/Offaly	243	11,200	26	46	9	63,292	100,752	59%	3%
Meath	242	12,553	29	52	8	23,577	97,830	315%	5%
Westmeath	205	10,313	26	50	8	42,619	79,904	87%	3%
Wicklow	276	9,877	34	36	10	61,979	95,214	54%	2%
Northern Region	**1,119**	**55,140**	**25**	**49**	**6**	**199,280**	**347,082**	**74%**	**10%**
Cavan/Monaghan	277	17,083	27	62	5	58,555	86,844	48%	2%
Donegal	354	19,643	24	55	7	79,899	128,666	61%	3%
Louth Div	240	8,308	24	35	7	17,913	56,077	213%	3%
Sligo/Leitrim	248	10,106	23	41	7	42,913	75,495	76%	2%
South Eastern Region	**1,006***	**108,374**	**26**	**108**	**6**	**248,894**	**601,962**	**142%**	**24%**
Kilkenny/Carlow	247	22,080	27	89	7	60,824	157,211	158%	7%
Tipperary	307	58,180	25	190	4	47,943	232,639	385%	13%

Waterford	237	13,256	29	56	8	53,828	110,503	105%	4%
Wexford	216	14,858	24	69	7	86,299	101,609	18%	1%
Southern Region	**1,804***	**182,377**	**29**	**101**	**4**	**546,419**	**797,047**	**46%**	**17%**
Cork City	555	34,895	27	63	6	105,357	199,754	90%	6%
Cork North	247	55,233	27	224	3	131,196	189,974	45%	4%
Cork West	242	47,665	31	197	4	123,238	173,687	41%	3%
Kerry	256	16,300	30	64	6	87,567	95,759	9%	1%
Limerick	505	28,284	29	56	5	99,061	137,873	39%	3%
Western Region	**1,221**	**83,285**	**28**	**68**	**6**	**285,415**	**481,971**	**69%**	**13%**
Clare	257	28,076	28	109	5	66,689	136,944	105%	5%
Galway	482	30,458	26	63	6	126,642	193,504	53%	5%
Mayo	249	14,208	30	57	6	48,903	85,562	75%	3%
Roscommon/Longford	233	10,543	27	45	6	43,181	65,961	53%	2%
Total	**9,720***	**523,198**	**28**	**54**	**7**	**2,040,179**	**3,498,400**	**71%**	**100%***

**Does not add up due to rounding.*
[1]Garda personnel only include Garda rank; DMR Office and Headquarters personnel are excluded; the numbers are averaged over the 2009-2016 period.
[2]Checkpoints where the number of "vehicles through a checkpoint", the number of "vehicles stopped and controlled" and negative, positive and failed/refused breath tests are equal to zero were excluded from the calculations, as these checkpoints are most likely invalid and just hadn't been invalidated on PULSE (n=27,011).
[3] Excludes checkpoints where the duration is 2 hours or longer (n=3,886).
[4]Base = 1,458,221.
[5]DMR Traffic and Garda Mounted Unit are not reported as separate Divisions on PULSE. Dräger readings for the DMR Traffic and Garda Mounted Unit should be subdivided among the six DMR Divisions. However, due to difficulties in accurately apportioning the breath tests of the former two among the remaining sixDivisions, DMR Traffic and Garda Mounted Unit are reported separately in this analysis.

Similarly to the overall Dräger breath test figure, Divisional Dräger figures should be treated with some caution, acknowledging the challenges encountered when calculating them.[7]

8.6.1 Divisional Comparison from 2010 – 2016

The ten Divisions with over 100% gaps between the Dräger and PULSE figures were investigated further to identify any commonalities or trends that could explain the larger gaps between Dräger and PULSE figures observed in these Divisions when compared to the other Divisions. The number of checkpoints conducted, and their duration, the breath tests recorded and changes in the personnel of Garda rank were examined in each of these Divisions between 2010 and 2016. However, no distinct commonalities could be identified.

While in Tipperary, Louth and Kildare Divisions the number of checkpoints conducted between 2010 and 2016 increased, the number of breath tests recorded on PULSE decreased. In Clare, on the other hand, both the number of checkpoints and the number of breath tests went up over the same period, whilst in the remaining six Divisions both decreased. See **Table 11.**

[7] See Appendix A - Comparing Breath Tests recorded on Drager Devices Vs M.A.T./M.I.T. Checkpoints on PULSE.

Table 11 shows that there was no common pattern even among the Divisions within the same Region. For example, Tipperary appears to have followed a different trend compared to the other three Divisions within the Region. The number of checkpoints in Tipperary over the 2010-2016 period increased while it decreased in the other three Divisions. The reduction in the number of breath tests was also relatively small in Tipperary (-14%) compared to the other three Divisions, where the reductions of between 71% and 79% had been observed.

The trend analysis was thus extended to the remaining Divisions to get a better understanding of the trends nationally.

Table 11: Divisional Trends, 2010-2016

Region/Division	% Difference between breath tests on Dräger vs. PULSE	% Change in checkpoints recorded on PULSE	% Change in breath tests recorded on PULSE	% Change in personnel of Garda rank	Change in the checkpoint duration (min:sec)
Dublin Region	**47%**	**-41%**	**-65%**	**-16%**	**-09:39**
D.M.R. Eastern	71%	-70%	-81%	-21%	-11:00
D.M.R. North Central	103%	-51%	-66%	-14%	-08:05
D.M.R. Northern	101%	-28%	-51%	-15%	-07:58
D.M.R. South Central	34%	-33%	-67%	-20%	-07:26
D.M.R. Southern	17%	-53%	-68%	-16%	-06:42
D.M.R. Western	373%	-29%	-59%	-14%	-11:19
Eastern Region	**104%**	**+7%**	**-37%**	**-9%**	**-06:05**
Kildare	125%	+69%	-12%	-4%	-09:11
Laois/Offaly	59%	-9%	-24%	-7%	-01:33
Meath	315%	-11%	-63%	-7%	-05:44
Westmeath	87%	-33%	-63%	-10%	-06:24
Wicklow	54%	+49%	-32%	-18%	-10:26
Northern Region	**74%**	**+37%**	**-35%**	**-13%**	**-01:05**
Cavan/Monaghan	48%	+63	-24%	-19%	-03:03
Donegal	61%	+30%	-35%	-17%	-03:37
Louth Div	213%	+1%	-35%	-3%	+7:44
Sligo/Leitrim	76%	+49%	-44%	-9%	-01:05
South Eastern Region	**142%**	**-16%**	**-62%**	**-8%**	**-04:02**
Kilkenny/Carlow	158%	-51%	-79%	-11%	-08:01
Tipperary	385%	+46%	-14%	-4%	-01:34
Waterford	105%	-54%	-78%	-8%	-06:40
Wexford	18%	-60%	-71%	-7%	-03:22
Southern Region	**46%**	**+107%**	**-9%**	**-10%**	**-04:39**
Cork City	90%	+49%	-24%	-9%	-03:52
Cork North	45%	+168%	-6%	-2%	-04:57
Cork West	41%	+162%	+21%	-13%	-04:38
Kerry	9%	+34%	-30%	-10%	-04:47
Limerick	39%	+121%	+6%	-14%	-06:32
Western Region	**69%**	**+80%**	**-6%**	**-6%**	**-09:22**
Clare	105%	+118%	+72%	-10%	-07:53
Galway	53%	+125%	-16%	-6%	-11:57
Mayo	75%	+17%	-30%	-5%	-08:33
Roscommon/Longford	53%	+22%	-45%	-4%	-06:30
Total	**71%**	**+34%**	**-40%**	**-12%**	**-05:44**

Logically, one would expect the number of breath tests to increase as more checkpoints are conducted. Indeed, overall, there was a statistically significant positive relationship between the number of checkpoints conducted and the number of breath tests recorded[8]. For example, in the Waterford Division, M.A.T./.M.I.T. checkpoints reduced by 54% and the number of breath tests conducted also decreased by 78%.

However, in about half of all Divisions (Kildare, Wicklow, Cavan/Monaghan, Donegal, Louth, Sligo/Leitrim, Tipperary, Cork City, Cork North, Kerry, Galway, Mayo and Roscommon /Longford) the overall number of checkpoints increased while the number of breath tests decreased. This indicates that there are other factors at play in these Divisions which affect the overall trend. Factors such as the time of the day when the checkpoint is conducted, location, the number of vehicles passing through could all be important in explaining why there were fewer breath tests recorded in these Divisions when the number of checkpoints increased. Recording errors and potential inflation of checkpoints on PULSE could also be contributing factors in explaining a different pattern observed in these Divisions. One could also speculate that the reduction in breath tests could be indicative of an improvement in the accuracy of recording of M.A.T./M.I.T. checkpoint data.

All of the above mentioned factors are speculative. In order to explain different patterns observed amongst the Divisions, a more in-depth analysis of each Division is required, which is outside of this examination's scope.

8.7 Conclusions

The analysis of M.A.T./M.I.T. checkpoint incidents on PULSE sought to establish factors that could help explain the disparity of 1,458,221 breath tests between PULSE and Dräger. While this is a substantial difference, the factors behind it are complex.

The analysis found that between 3% and 9% of M.A.T./M.I.T. checkpoints on PULSE (or between 15,082 and 45,246 checkpoint incidents) are estimated to have inflated breath tests, with the number of breath tests over what should have been recorded estimated to range between 106,177 and 318,530. Also, between 7% and 13% of M.A.T./M.I.T. checkpoints (between 35,191

[8] $r_s = 0.65$ (p (one-tailed) < 0.001). For more detail refer Appendix A - Comparing Breath Tests recorded on Drager Devices Vs M.A.T./M.I.T. Checkpoints on PULSE.

and 65,355 checkpoint incidents) are estimated to contain recording errors. These figures are not mutually exclusive.

Furthermore, analysis of M.A.T./M.I.T. checkpoint incidents with 50 or more breath tests recorded revealed that of the 3,971 incidents examined, 1,984 (50%) had breath tests recorded that could not have been conducted within the duration of the checkpoint, based on the premise that, on average, the process of conducting a breath test during a checkpoint takes four minutes to complete. This equated to 68,694 recorded breath tests that could not have been conducted within the time-frame.

Some level of recording error could be expected due to the manual input of the data, as was the case with the 61 incidents that contained an extra zero in the negative breath test field. However, errors also arose as a result of G.I.S.C. personnel equating the number of "vehicles stopped and controlled" to the number of negative, positive and failed or refused breath tests. It is essential that any field on PULSE is understood in the same way by all parties. The "vehicles stopped and controlled" field, by its title, is open to interpretation. However it is a measure of the sum of breath tests conducted, failed and refused. All of this data is captured in other fields and so, this field essentially serves no purpose.

Based on the small number of calls reviewed at G.I.S.C. it was evident that both Garda members and G.I.S.C. call takers were confused by the data field. It was also apparent that G.I.S.C. personnel, in some instances, recorded the figures provided to them for "vehicles stopped and controlled" as the number of breath tests.

The analysis of a 6 month sample of incidents that were subject to a review in 2012 confirmed that G.I.S.C. applying the rule that the number of "vehicles stopped and controlled" should add up to the number of positive, negative and failed or refused breath tests was responsible for marginally increasing the number of breath tests in the sample, by 1,026 or 0.42%. However, how this rule affected the recording of breath tests at the incident creation phase is unclear. The impact could be substantial considering that there are over 500,000 checkpoints on PULSE and the overall compliance rate by G.I.S.C. personnel with the rule between the 25th July 2010 and 10th April 2017 was 93%. The full impact of this on the breath test inflation cannot be quantified without actually listening to all G.I.S.C. call recordings and interviewing each reporting Garda.

While data issues could explain some of the disparity between PULSE and Dräger breath tests, different practices within the Divisions also had a role to play. The analysis of trends across the 28 Garda Divisions could not identify any commonalities between the worst or better performing Divisions. Indeed, even Divisions within the same Region displayed different patterns with regard to the number of checkpoints and breath tests conducted between 2010 and 2016. However, it was apparent that considerable differences among the Divisions exist. For example, the gap between Dräger and PULSE breath tests in Tipperary was 385% while in Kerry it was 9%. This indicates that there are other factors at play in these Divisions which affect the overall trend.

9. Feedback & Review

9.1 Overview

The analytical work carried indicated that a portion of the breath test anomaly could be attributed to recording errors and unintentional inflation of breath tests. But this analysis has also determined, with a degree of certainty that these reasons do not account for the full 1,458,221 disparity in the number of breath tests recorded on PULSE versus those recorded by Dräger devices.

Given that the process of scheduling and performing M.A.T. checkpoints was largely carried out at Divisional and District level; this examination also focused on researching and identifying the operational factors and local delivery models which could affect the accuracy of this data and/or be responsible for the anomalies. There is likely to be varying expectations in relation to this area of examination and it is important to highlight that this examination was not established or empowered under any statutory provisions relating to discipline as set out in the Garda Síochána Act, 2005.

The examination consistently focused on ensuring that every possible avenue meriting investigation was explored to determine the reasons as to how and why the above-mentioned numerical disparity had arisen. Divisional fieldwork was viewed as an essential element of this process. Of equal importance was enabling all employees within An Garda Síochána to voice, confidentially or otherwise, any information they considered relevant to the examination team.

For this reason a notice was placed on the corporate notices section of the Garda Portal. The various representative bodies were consulted to facilitate, if required, confidential reporting. Regional Traffic Superintendents and Inspectors who are currently allocated Traffic Portfolios nationwide were also consulted. Finally, to examine breath test recording policies, procedures and practices in comparable Police services, members of the examination team visited three external Police services.

9.2 Divisional Field Work

A key component to the enquiry process was to examine, throughout the Divisions, the implementation of M.A.T./M.I.T. checkpoints and identify any factors which may have contributed to the disparity between PULSE breath test data and Dräger data and get feedback from Divisional and District managers. Two considerations were explored in the selection of Divisions:

1. Each region should be represented.
2. Statistical data was compiled by G.N.T.B. in relation to each Division nationwide. This data was used to select the Divisions with the highest/lowest numerical disparity within each Region.

Bearing the above criteria in mind, the Divisions outlined in **Table 12** were examined;

Table 12: Divisions Selected for Fieldwork

Region	Division
DMR Region	DMR West
	DMR South
Eastern Region	Meath
	Laois/Offaly
South Eastern Region	Tipperary
	Wexford
Southern Region	Cork City
	Kerry
Western Region	Clare
	Longford/Roscommon
Northern Region	Louth
	Donegal

DMR Regional Traffic	

The structure of the field work involved consultation with Divisional and District Officers within specified Divisions by inviting their feedback and/or insight into the reasons for any discrepancies which existed between PULSE breath test data and Dräger device data. A standardised questionnaire was used to capture particular information which was considered relevant to the examination. This was supplemented by a general interview with Chief Superintendents and District Officers within each of the Divisions selected.

The purpose of the field work was essentially research in nature. Vital to determining why there was a disparity in data nationally and how this had occurred, was an on the ground insight into the implementation and operation of M.A.T./M.I.T. checkpoints at Station, District and Divisional level. This field work was also considered an important avenue to establish why there was such large variations in breath test data nationally, between Divisions, and even within individual Regions.

9.2.1 Commonalities and Trends from Divisional Field Work

The commonalities and trends are issues which were highlighted by Divisional Officers and District Officers across all the Regions as factors which may have contributed to the disparity between PULSE and Dräger figures. No priority or hierarchical ascendancy has been attributed to any individual issue or factor identified.

Table 13: Commonalities and Trends from Divisional Field Work

G.I.S.C./PULSE	There was an almost universal lack of knowledge amongst Divisional and District Officers that breath test data was recorded within the statistics tab of M.A.T./M.I.T. checkpoint incidents. Having become aware of this tab, following the emergence of the conflicting breath test data into the public domain; there was a common concern regarding how accurate data could be in relation to M.A.T./M.I.T. checkpoints, due to the volume of data required to complete the M.A.T./M.I.T. checkpoint statistics tab. Uncertainty existed in relation to recording of M.A.T./M.I.T. checkpoint data. There were conflicting views on whether all "vehicles stopped and controlled" would result in breath tests. Some indicated that G.I.S.C. call takers only ever asked for the number of "vehicles stopped and controlled" and not the number of breath tests. There was a common awareness that Gardaí were experiencing delays in contacting G.I.S.C. to create incidents on PULSE. Several senior managers highlighted the contradictory data generated by the PULSE reporting services when compared to other PULSE search methods or manual examination of PULSE data.

Dräger/ Dräger Management	There were no established common policies or procedures identified in relation to Dräger management across the different Divisions. Wexford Division, which had a relatively low percentile discrepancy in breath test data, had processes orientated towards stricter governance of Dräger management implemented by the Divisional Traffic Sergeant. The movement of Dräger devices between Divisions was also highlighted as an issue. For example, "super" (large scale) checkpoints were conducted within the Division and recorded on PULSE; however, Traffic Units from outside Divisions would assist in these, meaning that the Dräger breath test data was inadvertently attributed to the Division in which this outside unit was based. By extension this would mean that mouthpieces issued to individual Districts and Stations were used elsewhere. Dräger devices for calibration were sometimes submitted on a Regional basis, resulting in incorrect Dräger devices being returned to Divisions.
Training/Legislation	The common issue throughout the Divisions concerned the complete lack of training of Garda members. There was particular concern in relation to the impact of this in terms of the comprehension and operational implementation of policy and procedures relating to M.A.T./M.I.T. checkpoints. The need for C.P.D. training on a Regional capacity was highlighted.
Supervision Staffing Levels	The lack of Sergeants to perform front line supervisory duties throughout Divisions was consistently raised as an issue throughout the Divisions. There were examples of where there were no supervisory Sergeants available for entire shifts; not to mention specifically to supervise M.A.T./M.I.T. checkpoints. Supervision of these checkpoints appeared to be an exception rather than a norm. There were examples where Divisional Traffic units were located in different Stations/Districts and being supervised by one Sergeant. This created issues for the proper supervision of traffic personnel. In every Division, the allocated traffic Inspectors had multiple portfolios and were unable to solely concentrate on traffic duties. In some cases, this also included prosecution of cases in Courts across the Division/Region on one or more days every week. In Meath, at one point the sole Inspector allocated to this Division had multiple separate portfolios, including Traffic. A lack of operational personnel was/is a significant issue for local senior management. There were limited personnel to conduct M.A.T./M.I.T. checkpoints. Senior management were very clear that the priority was to provide a front-line policing response and vacancies in Divisional Traffic Units remained unfilled.

Mouthpieces	There were simply no Divisional or District methodologies evident for tracking and/or counting of mouthpieces across Divisions. Some Divisions highlighted 'Super M.A.T.s' where Dräger devices and mouthpieces from one Division would be used and counted in another Division. Also, mouthpieces were obtained from other sources, i.e. Regional Traffic, meaning there were no local mechanisms available to obtain accurate mouthpiece data.
Other Factors/ Trends	There was little evidence that any structured review process, or other formal mechanism, existed to measure capacity or to determine the ability to carry out the numbers of M.A.T./M.I.T checkpoints being authorised within individual Divisions, Districts or Stations. There was no motivation to inflate figures as breath test data was not measured and they were not an avenue for career progression or promotion. The primary focus was detection of drunk driving and other life-saver offences with the intention of reducing serious road traffic collisions and deaths. There was a view that M.A.T./M.I.T. checkpoints were not the most effective mechanism to detect persons engaged in drink driving; however, the value of these checkpoints as a high visibility policing tool was acknowledged. Local issues were highlighted in certain Divisions which had an effect on the recording of breath test data, namely; the realignment of Divisional boundaries around 2008/2009 impacted upon the data relating to certain Divisions, and Special events like festivals and concerts have distorted breath test data as breath tests conducted by other traffic units outside the Divisions are not attributable to the Divisional Dräger count. During the course of the Divisional field work issues in relation to personnel, supervision and training were common in every Division visited. Other factors related to Dräger management, Regional/Divisional Traffic, and movement of mouthpieces were highlighted as issues which had an effect on the discrepancy of breath test data.
	G.N.T.B. were channeling National Traffic Enforcement Operations through Regional Offices and Regional Traffic Superintendents; meaning that Divisional and District Officers were often not consulted in relation to these matters and had little or no operational oversight.

Regional and Divisional Traffic	The fact that local senior managers were unaware of operations and events inhibited the coordination of resources, collective planning and impacted on the collection of statistical returns. Some of the operational demands were not attainable or achievable. The Divisional data, released into the public domain in March 2017 which related to the DMR Divisions did not take into account the activities of Regional Traffic units across this Region.
Management Pressure/Statistical Competition between units	During an interview, it was claimed that demands were made by senior management for various figures to improve including the number of breath tests conducted. This Garda member also disclosed that there was competition amongst various Garda members that led to generous estimating of the breath tests conducted at checkpoints. This concern has been documented and forwarded to Assistant Commissioner, RP & MEP.

9.3. Submissions

As part of the examination process there was a necessity to get an insight from all employees within An Garda Síochána. This prerequisite was borne out of the acceptance that to comprehend the overall process and understand how breath tests were administered in the live environment, the input of all interested personnel would be useful. The examination team sought the input from individual employees, initially via a request on the Garda Portal and, subsequently all Garda personnel via their respective representative associations.

9.3.1 Garda Portal

On 26th May 2017, a corporate notice was placed on the Garda Portal seeking submissions from individual personnel within An Garda Síochána, of all grades and ranks, in relation to the anomalies between the breath test data recorded on PULSE and number of breath tests recorded on the Dräger devices. A copy of this notice is set out hereunder:

Figure 7: Notice for Submissions on the Garda Portal

MAT Checkpoint Enquiry

Colleagues,

Currently, an examination has commenced in relation to MAT checkpoint incidents and the anomalies between the amount of Breath Test data recorded on PULSE and the number of breath tests provided by the Medical Bureau of Road Safety. The terms of reference are;

'This examination of the processes and procedures in place, for the period 2010 to 2016, for the recording of breath testing at Mandatory Alcohol Testing (M.A.T.) Checkpoints and which resulted in the inaccurate recording of those statistics which were provided to agencies outside of An Garda Síochána and which were also published on the Garda website'.

If you have any submissions or other relevant information or you wish to share your operational experience in this area with the examination team you can submit your views through the following email – MAT.Enquiry@garda.ie with the Subject title – **MAT Submission** by Monday 15th May 2017.

Your assistance is appreciated.

Michael O'Sullivan
Assistant Commissioner

In total, only 7 submissions were received, however the information supplied gave a useful insight into practical issues faced by Garda members during the operation of M.A.T./M.I.T. checkpoints and the recording of the related data on PULSE. The information provided has been summarised below.

9.3.2 Summary of Submissions Received

- Most Garda members do not "*put much stock into statistics*" which led to casual recording. The need for supplying such data was seen as a "*management gimmick*". It was suggested that a training program should be rolled out educating Garda members on the importance of data collection and crime counting rules.
- Most Garda members were focused on detections at checkpoints not the number of breath tests.

- Garda members placed a different view on what the term "vehicles stopped and controlled" meant, some considered stopping a vehicle to check tax/insurance as stopped and controlled whereas others thought it was the number of breath tests conducted. The misinterpretation was more prevalent in 2011 and 2012 than in recent years.
- The inputting system should be simplified and the need for irrelevant data fields should be removed.
- Garda members became disillusioned having to record checkpoints that were not carried out.
- There was no integrated policy/training between Garda members inputting incidents and the G.I.S.C. call takers.
- Garda members had issues with the Dräger counter. For example if the start Dräger reading was not recorded at the beginning of the checkpoint, the Garda member was forced to estimate the number of breath tests completed.

9.3.3 Garda Representative Association (G.R.A.)

On 4th July 2017, a meeting took place with representatives from the G.R.A; several of whom were experienced members of Traffic Units. They were provided with details of the matter under examination. The G.R.A. outlined the association's position that the breath test anomaly was entirely a management issue and that no blame should attach to their membership. They highlighted many of the issues already referred to in this report.

A view was expressed that zero was not an acceptable statistic to management. Prior to the meeting concluding, the G.R.A. representatives were asked if the association wished to avail of an opportunity to make a formal submission documenting the views of their membership.

A written submission, dated 20th July 2017, was subsequently received from the G.R.A. This submission comprised of three pages and hereunder is a brief synopsis of the main points contained therein.

The submission reaffirmed the G.R.A.'s assertion that "a significant number of management and supervision practices are responsible for creating such a public debacle and controversy surrounding incorrect breath test numbers". It further stated that the "current debacle is a Garda

corporate and organisational failure; and the Commissioner's comments suggesting that it was either incompetence or dishonesty of individual members has proved problematic among our membership".

This submission highlighted "undisputed, longstanding problems with the collation, categorisation and reporting in An Garda Síochána" and addresses the wisdom of correlating "statistics as mere optics".

The G.R.A.'s submission outlined that when it comes to roadside checks, its members "have little administrative back up, poor support and no supervisory guidance", it further outlined that "there are consequences when you starve any organisation of resources, training and management support", pointing in particular to the national reduction in Gardaí attached to Traffic Corps "from around 1200 to 680 members" and the "absence of an integrated policy across the training of G.I.S.C. and frontline members."

These perceived deficiencies "have been coupled with an unhealthy enthusiasm to provide statistics to support and purport management's success; we believe Chief Superintendents have often set unrealistic and impossible targets and timelines". Finally the submission suggested cognisance of Goodhart's Law: "when a measure becomes a target, it ceases to be a good measure".

9.3.4 Association of Garda Sergeant and Inspectors (A.G.S.I.)

On the 29th June 2017, a meeting took place with two representatives from the A.G.S.I. where they were provided with details of the matter under examination.

During the meeting, the representatives were tasked with canvassing their membership in relation to various aspects of the examination with a view to making a formal submission. The representatives expressed the viewpoint that submissions were previously sent into the examination. They undertook to bring the matters discussed to the attention of the executive committee.

A written submission, dated 25th July 2017, was subsequently received from A.G.S.I. This submission was a comprehensive seven page document, hereunder is a brief synopsis of the main points contained therein.

- There were issues surrounding the numerical data provided to G.I.S.C., namely that Garda members were not always asked enough questions to differentiate between "vehicles through a checkpoint", "vehicles stopped and controlled" and the number of breath tests conducted. As a result, this may have resulted in the misreporting of information. These issues are as a result of the lack of clear and consistent policy and training.
- There was an issue that G.I.S.C. were unable to create M.A.T./M.I.T. checkpoint incidents if no vehicles passed through the checkpoint. In some instances checkpoints were carried out and no car passed. It was put forward that Garda members may have entered sufficient data to enable incidents to be created to ensure management were aware that the checkpoint occurred.
- The policy of recording data at checkpoints was not detailed enough to ensure consistency across the organisation. M.A.T./M.I.T. checkpoint incidents are typically created at the end of a tour of duty. If there was a large number of Garda members on the checkpoint the reporting Garda member may not have necessarily had the precise details from all the members activities on the checkpoint. This could have resulted in estimation of breath tests, "vehicles stopped and controlled" etc.
- There was a requirement from some Garda managers to show increases in detections month on month, year on year. It was believed that managers used increased enforcement levels at a time of reducing resources to improve their promotion profile. To satisfy Garda management demands and avoid conflict members reported they felt pressured to inflate numbers. It was feared that if units didn't reach targets they could be redeployed from temporary roles. No one ever asked how targets were achieved but they asked how targets were not achieved.
- Garda numbers reduced from 2008 – 2013 and there were less Gardaí available to perform outdoor duties. Some members may have felt that if higher enforcement levels were reported it would reduce drink driving etc. Supervision was also stated as an issue, the decline in supervisors within the organisation of An Garda Síochána meant that there was a reduced capacity to carry out outdoor supervisory functions.

- There was no continuous professional development from 2008 onwards until recent times. An example of deficient training was provided whereby a traffic sergeant who was assigned to his position for a number of years had never had training specific to his role. Education was by way of "*on the job training*" by colleagues on the unit.
- There was an absence of clear policy which meant that different approaches to data capture, reporting and recording were implemented across the organisation. If G.I.S.C. required information in a particular format but Gardaí were capturing it in a different format and communicated it from their records it was unavoidable that information would be inaccurate despite everyone's best intentions.

In conclusion, A.G.S.I. outlined that it was their belief that there was no systematic or coordinated attempt to maliciously or fraudulently misrepresent the facts by any of its members.

9.3.5 Association of Garda Superintendents

On the 29th June 2017, a meeting took place with a representative from the Garda Superintendent Association where details of the matter under examination were outlined. During the meeting, the representative outlined that, generally, there was no awareness that breath tests were recorded on PULSE and no emphasis or importance was ever placed upon them. A view was also expressed in relation to capacity issues; specifically that no one ever looked at the capacity to conduct M.A.T./M.I.T. checkpoints despite scarce resources.

9.3.6 Association of Garda Chief Superintendents

The examination team also met with members of the Chief Superintendents Central Executive Committee. Again the matters under examination were formally outlined and a request made that any submissions deemed appropriate by the Association would be welcomed. Various submissions were subsequently received. These broadly mirrored the findings of the Divisional fieldwork and are synopsised below.

- There was an expectation that Divisional Officers would deploy M.A.T./M.I.T. checkpoints as a central element of their Divisional Roads Policing plan.

- Chief Superintendents were not put under any direct pressure to increase the number of M.A.T./M.I.T. checkpoints; however, there was comparison and scrutiny of the number of Divisional M.A.T./M.I.T. checkpoint numbers at Regional P.A.F. meetings, and by way of yearly comparison.

- Chief Superintendents accepted that consistently there were M.A.T./M.I.T. checkpoints which were not carried out, as long as there was a valid reason for not doing so.

- Chief Superintendents stated that they did not put any pressure on members within their Divisions to maintain or increase breath test numbers, because there was a general lack of awareness of the checkpoint tab on PULSE M.A.T./M.I.T. incidents.

- Now that Divisional Officers are aware of this tab, they question the relevance of much of the information gathered and the ability of members of their Divisional force to accurately gather such a large amount of information. The over-riding consideration should be: "do we need this information and why do we want to record it".

- Current policies and procedures are efficient if clearly understood and followed, but this is not the case for most members. Finally, it was highlighted that the PULSE update (7.1, introduced on 4th December 2016) was good, but that there were many data entry errors occurring. It did not specify the exact nature of these errors.

9.4 Traffic Superintendents & Inspectors Consultation Meeting

An open forum consultation meeting was conducted on 8th June 2017 as a fact finding exercise. It sought the opinions of Traffic Superintendents charged with managing roads policing across the Regions, and Inspectors allocated Divisional Traffic Portfolios. Their first-hand knowledge of the issues regarding traffic policing was provided to members of the examination team. Details of the topics discussed and issues highlighted during the course of this meeting are outlined below:

- Dual reporting aspect is a major issue; there must be one reporting structure either to G.N.T.B. or the Divisional Officer.
- Insufficient guidelines for using breath test devices.

- Difficulties with G.I.S.C. waiting times resulting in incidents being put on PULSE a number of days later.
- There was a low level of awareness of the M.A.T./M.I.T. statistics tab or that breath test data was being recorded.
- Gardaí did not appreciate the value of the data in the M.A.T./M.I.T. statistics tab.
- Traffic inspectors fulfilling multiple portfolios which meant it was difficult to complete traffic tasks.
- Lack of members of supervisory rank – Sergeants.

9.5 Review of Policy and Procedure in other Policing Jurisdictions

In the course of this examination, the team travelled to police services in Northern Ireland, Scotland and England to look at their approach to roads policing. These police services were selected based on their similar demographics and their urban/rural policing requirements.

9.5.1 Police Service of Northern Ireland (P.S.N.I.)

For geographical and socio-economic reasons, the P.S.N.I were visited to gain a comprehensive insight into their approach to roads policing and, in particular, the mechanisms employed to manage the prevention and detection of intoxicated driving offences, and the process of gathering, collating and disseminating related statistical data.

The synopsis of information gathered during this meeting with the P.S.N.I is outlined below:

- The P.S.N.I. began conducting alcohol checkpoints at the start of December 2016. This was a new departure for the P.S.N.I. and is legislated for by Part 2 of the Road Traffic (Amendment) Act (Northern Ireland) 2016. The alcohol checkpoint operates in a similar manner to the M.A.T./M.I.T. checkpoint conducted by An Garda Síochána. It must be authorised in advance by an officer of Inspector rank or higher; the authorisation must be signed and state the day, date, time, location and duration of checkpoint.

- The P.S.N.I. use the Lion 500B preliminary breath test device. This device is manufactured by a British company to UK (Home Office) specifications and it came into

use in the P.S.N.I. around 10 years ago. The device uses a disposable mouthpiece which must be replaced after each test.

- The user (Police Officer) enters the subject type, reason for test, subject age and subject gender into the Lion 500B device; the test is then conducted. The device automatically records the date, time, test number, alcohol reading or failure to provide. The user has to enter the subject's ethnicity, officer ID number, and location code. The P.S.N.I. experience is that there is complete accuracy with data which is recorded automatically.

- The Lion 500B device is downloaded every 35 days. To download a device, it is connected to a docking station and the stored data is automatically transferred to reporting services. If the device is not downloaded after 35 days it ceases to function until such download takes place. Each device is required to be calibrated every 6 months. Forensic Science Northern Ireland have responsibility for the calibration of the Lion 500B devices and visit police stations as required to conduct tests on site.

- The only record of alcohol checkpoints is the authorisation which is stored on the 'Niche' system (equivalent of PULSE). However, no further information is recorded. Upon completion of a checkpoint an officer does not record it either manually or electronically. The fact that a breath test or tests were conducted is not recorded on any system. There is no requirement to record "number of vehicles through checkpoint", "number of vehicles controlled", number of "breath tests" etc. The P.S.N.I. relies on data downloaded from the Lion 500B device only.

- In general, the number of breath tests conducted is not used as a tool to measure roads policing activity. However, for a specific 'Christmas' campaign this data is used to measure the percentage of breaths tests which were positive. Again, this data is retrieved directly from the download of the devices so there is no capacity for human error.

- The number of breath tests conducted is not set as a target in policing plans. The current 2016-17 plan has targeted a 10% increase in five Road Traffic offences, one of which is drink/drug driving.

9.5.2 Police Scotland

A visit was also conducted to Police Scotland as part of this examination process. The synopsis of the information provided by Police Scotland is outlined below:

- No quantitative targets for road policing; performance is measured in terms of progress towards casualty reduction targets.
- Transport Scotland is responsible for the gathering of statistics.
- Police Scotland has no common collision or crime reporting computer system. Each Division uses different information systems and I.T. software. Paper forms are used to record any required data and report to Transport Scotland.
- There are three different models of roadside breath screening devices used across Scotland.
- Breath test devices are allocated to individual Police vehicles. The devices purely show a pass or fail. Data available on the devices is not downloaded or used for statistical purposes as the significant statistics are deemed to be the tests conducted at a Police Station when an arrest is made.
- Breath test devices are on issue to all patrol cars and alcohol testing is the responsibility of all Police Officers.
- Police Officers record the numbers of positive breath tests on paper, and these returns are declared by individual Police Officers.
- Checkpoints are conducted on occasion and are referred to as “Stop Points”. Checkpoints are not employed routinely and are usually only employed as part of a particular campaign i.e. Christmas campaign etc.

- The most common approach taken to targeting offenders are targeted vehicle stops. The random selection of drivers for breath testing is not available to Police Scotland. Prior to requiring an individual driver to take a breath test Police in Scotland make the requirement based on one of three grounds: following the occurrence of a road collision; an offence is observed/disclosed; and/or there is a suspicion of drunk driving.

- The number of mouthpieces issued is an economic issue and not used as a measure of productivity or activity on the part of Police Officers.

- Training for front line officers is conducted online via the "Moodle" system. Courses are completed online and once completed they are uploaded to the individual Police Officer's personnel file. The record of the completed course is available to assessors when considering individual candidates for promotion. The "Moodle" system consists of online videos and reading material combined with questions on conclusion of the course.

9.5.3 Essex Police

Finally, a field visit was conducted to the Essex Police. An outline of the Essex Police's approach to roads policing and specifically breath testing is listed below:

- M.A.T./M.I.T. checkpoints are not conducted by Essex Police. There is no legislation supporting same. In general, very few checkpoints of any nature are conducted during normal day to day policing duties. Their Traffic Units have designated 'Days of Action' or Special Operations' where an area is subjected to saturation policing for a period of time.

- Random breath tests are not conducted by Essex Police. An officer requires grounds to justify the taking of a breath specimen, such as manner of driving, smell of alcohol etc. Officers can breath test drivers involved in road traffic collisions.
- The type of alcometer used by the Essex Police is the Dräger 6810. The age, sex of driver, and, reason for test, are manually inputted by the user. The device then records the result of the breath test. The device is capable of holding the results of the previous 2000 tests and comes with an optical interface to transfer data.

- In respect of the use of the Dräger device there is very little training provided as the devices are straightforward. Essex Police recently introduced drug testing and to date have trained 200 officers out of a total of 3000. The training is mainly aimed at officers engaged in roads policing due to the prohibitive cost of the test swabs.

- The taking of a breath test is not recorded on any system. If a breath test is positive and the driver is arrested then an incident will be created upon arrival in a custody suite. This incident will refer to the arrest, custody record and everything which flows from there. There is no section to record if a breath test had been conducted.

- If there is a Traffic Operation (Christmas/Summer) then a return will be forwarded upon its conclusion which will include the number of breath tests (positive/negative), along with other road traffic policing actions.

- The number of breath tests conducted is not a target in the Essex Policing Plan. However, 'Priority 7 – Improve Safety on our Roads' has an aim of 'reducing harm on the roads and promoting safer driving'.

- Essex Police are moving away from complex and detailed policy documents. Policy documents are now aimed at the higher levels of the organisation while procedure/guideline documents which are concise and brief (2/3 pages) are aimed at operational officers.

9.5.4 Breath Tests from other Policing Jurisdictions

An avenue of enquiry conducted was to review whether issues had ever arisen in relation to breath testing and/or M.A.T./M.I.T. checkpoints in any other jurisdictions. This research indicated that the issue which is the subject of this examination is not unique to Ireland, and that at least two other Police services encountered difficulties in recording breath tests using an alcometer device that is not designed for, or intended to be used in gathering statistical data.

Of particular relevance is a similar enquiry which took place in Queensland, Australia in 2007. The issues which arose and the circumstances bear a striking resemblance to the subject matter of

this examination. A full investigation was conducted into the alleged falsification of breath tests by Police Officers within the service. The findings were inconclusive. It was noted that some falsification of breath test data occurred, but this was not quantified. The official report on this matter was not placed into the public domain.

In another case, rather than there being any actual allegation of inflation or falsification of breath tests, the situation presented was a notable reduction in the number of breath tests conducted when the Dräger device (currently in use within An Garda Síochána) was replaced with a device which created more accountability.

9.6 Conclusion

The fieldwork carried out as part of this examination was intended to identify the factors which existed that caused the numerical disparity in breath test data and enabled it to develop over the years without any notice or intervention by any person, at any level, of An Garda Síochána. The most significant reason is very simple; very few people at operational level actually knew that breath tests were being collated, recorded and provided to external agencies as valid statistical information.

The capacity of individual members to accurately gather such a large amount of unnecessary information, including breath tests, is questioned. It is also alleged that management applied pressure to conduct M.A.T./M.I.T. checkpoints, which further exacerbated the issue as individual members responded by inflating figures. In conjunction, Divisional and District Officers stated that they were not aware of the checkpoint tab of M.A.T./M.I.T. incidents on PULSE, in which this data was recorded.

Considering there is now a general awareness within An Garda Síochána of the checkpoint tab on PULSE; there exists widespread confusion as to the relevance of much of the information within this tab.

Visits were carried out to external Police Services in Northern Ireland, Scotland and England. These determined that there is no reliance placed in those jurisdictions on the recording of breath test data and that only positive breath tests are considered relevant.

What is alleged is that there has been a failing in terms of gathering and reporting correct statistical data. It would appear logical that if an organisation chooses to collect data that is intended for release as qualified statistical data into the public domain, that everyone involved in the process should, firstly, know this data is being gathered and, secondly, should be aware of the reason for gathering data.

In the case of breath test data there was a clear information gap regarding the importance which was being placed on same. The process of gathering breath test data begins on the front line. While it may be generally assumed that this process was being carried out responsibly and correctly by every member engaged in this process, the numerical data suggests otherwise.

The review of G.I.S.C. call recordings, outlined in the previous chapter, also indicates that a degree of carelessness and estimation was part of the data collection process. It appears that a good deal more supervisory oversight was required. It is very apparent from the field work carried out that there was a widespread and significant deficiency in the availability of front line supervisors. There is clearly corporate risk in gathering any data in an unsupervised manner.

10. Governance

10.1 Overview

This element of the examination is orientated towards reviewing the governance process which was in place between 2009-2016 and whether this process, or the absence of same, enabled the compilation of the conflicting breath test data which was recorded during that time. Also examined was whether the corporate reaction initially taken, as an interim response following the emergence of this inconsistent data, has resulted in a more direct correlation of Dräger breath data versus that recorded on PULSE. Finally, given that the last and most focused stage of An Garda Síochána's corporate governance response was implemented as part of PULSE release 7.2 on 13th August 2017. There is a need to examine whether the measures contained within this I.T. solution are likely to be effective.

10.2 Historical Governance Structures

The complexity of operationally implementing governance structures in an organisation whose service model is people orientated should not be underestimated. This is especially so in the case of An Garda Síochána where many members of this organisation are tasked, on a daily basis, with engaging in complex scenarios without direct supervision. However, a general lack of frontline supervision, based on information provided to this examination, was frequently the case when conducting M.A.T./M.I.T. checkpoints. It was these checkpoints which were the starting point for the recording of breath test data. Therefore, it is logical that the examination of the governance process begins at this point.

Gathering and recording PULSE breath test data is reliant on human input. Gardaí conducting a checkpoint relay the number of breath tests carried out, along with various other pieces of numerical data. In terms of the governance structures which guide this process, this consists of policy and procedure documents. These have been documented elsewhere in this report and it is not intended to repeat same. As noted previously, these directives, while valuable and relevant to ensuring a consistent organisational approach, add complication to the M.A.T./M.I.T. checkpoint process. In addition there was no direction issued to Garda members in respect of definition of the

data field "vehicles stopped and controlled" until 2016 while G.I.S.C. personnel were provided with this definition in 2012.

Prior to the emergence of conflicting breath test data, the focus of all corporate governance measures and management concentration was towards ensuring the maximum amount of M.A.T./M.I.T. checkpoints were conducted by the limited personnel resources available. The intention of An Garda Síochána's Roads Policing Policy was to deter people from drink driving and where drivers engaged in this practice, to detect them while doing so.

Collecting and recording breath test data became part of the M.A.T./M.I.T. process. However, in terms of priority, there are a number of other considerations that take precedence over gathering statistical data for Garda members conducting a M.A.T./M.I.T. checkpoint. Virtually all of An Garda Síochána's policy and procedure is focused on ensuring compliance with these more important points, examples of which are: interpretation of legislation, safety of members carrying out checkpoints, resources necessary to conduct M.A.T./M.I.T. checkpoints and use of appropriate health and safety equipment.

Perusal of the various instructional documents issued indicates that recording of breath test data was not identified as an important element for consideration by individual members. In addition, this examination has failed to determine any specific example where operational reliance was placed on this data or why breath test data should be gathered at all. As indicated in the previous chapter, none of the three external police services visited by the examination team maintain statistical data on the number of negative breath tests. The only data considered relevant is positive breath tests.

Information gathered from virtually every source across An Garda Síochána, indicates that there was a lack of knowledge that the number of breath tests were being recorded within the checkpoint tab of M.A.T./M.I.T. incidents placed on PULSE.

This was certainly the case in respect of Divisional and District Officers who were interviewed as part of this examination process. These Officers are ultimately the avenue for ensuring adherence with specific governance measures by members within their respective Districts/Divisions. The fact that this knowledge gap existed meant that the importance of data was simply not known and

therefore not communicated to line managers, which is a critical element of ensuring frontline compliance with corporate governance structures. Essentially, managers could not monitor the collection and collation of unknown data.

The Dräger device was neither designed nor intended to gather statistical data which would aid in the operational administration of the corporate governance process. The purpose of this device was to indicate whether a person had consumed a certain level of alcohol or not. It was viewed by personnel within An Garda Síochána as a mechanism to carry out this function. Until the issue in relation to breath test anomalies emerged into the public domain, it appears that no reliance was placed within this organisation, at any level, on the number of breath tests recorded, individually or collectively, by this device. Therefore, the number of breath tests recorded by Dräger devices was not subject to any governance structures.

On the 22nd July 2014 H.Q. Directive 59/14 issued; it outlined that the primary responsibility for conducting inspections and reviews lie with local management. This is overseen by the audit and review process carried out by the Garda Internal Audit Section (G.I.A.S.) and the examination and review process carried out by the Garda Professional Standards Unit (G.P.S.U.). The process involves a self assessment exercise including the completion of structured certification forms by Garda officers and Heads of Section. This is supplemented and supported by the independent overseeing process conducted by G.I.A.S. and G.P.S.U.

H.Q. Directive 59/14 made no reference to the number of M.A.T./M.I.T. checkpoints, number of breath tests, deployment of Drägers or allocation of mouthpieces ever being a criteria for inspection or review. Therefore these issues were not the subject of examination or assessment by local Garda management.

In terms of numerical anomalies which emerged into the public domain, it is obvious now that there were clearly significant issues with regard to ensuring that the PULSE breath test data being recorded was accurate when compared with Dräger devices. All corporate governance measures were focused on the conduct of M.A.T./M.I.T checkpoints and PULSE recording, because Dräger data was maintained by a corporate body outside of An Garda Síochána. In advance of this issue being identified, there were no corporate governance structures available to management, at any level, which would ensure that the number of breath tests recorded by Dräger devices were

aligned with the numbers recorded on PULSE; nor did a coordinated structure exist which would enable an organisational realisation that any issue existed between both sets of statistical data.

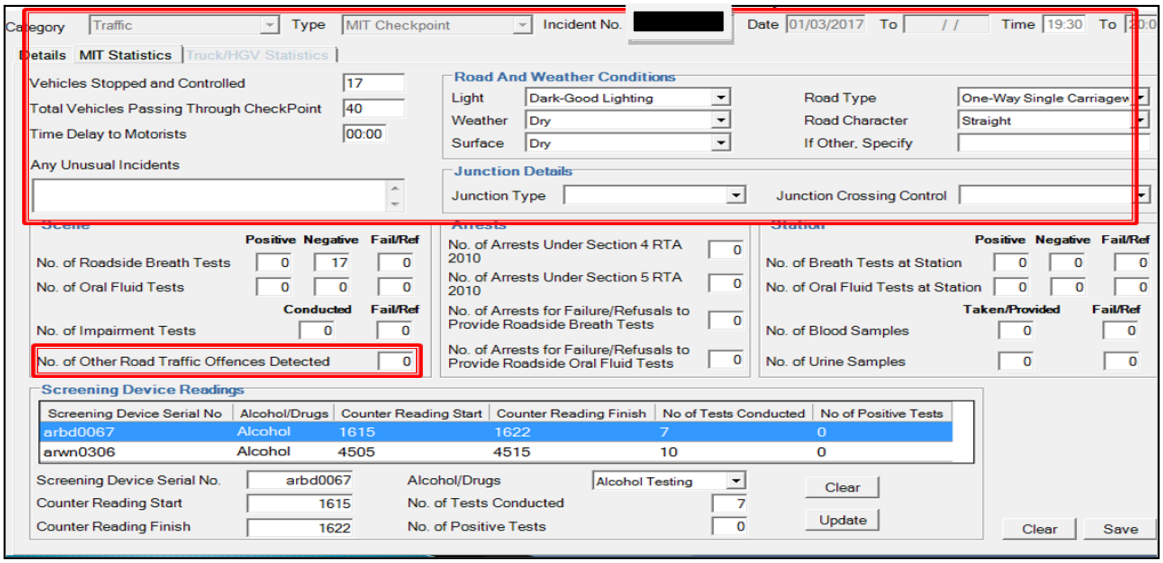
10.3 Current Governance Structures

As the determination process to identify the full scale of the issue regarding the recording of breath tests on PULSE was ongoing, an instruction was issued on 7th April 2016 from Assistant Commissioner, G.N.T.B. via a HQ Directive 23/2016. This directive introduced a M.A.T. Checkpoint Return Form and directed that Dräger device serial numbers and readings were to be recorded in the narrative of all M.A.T. PULSE incidents. This was intended as a temporary fix to address the numerical anomalies while a review of the issue was in progress and broader, more assertive, governance procedures could be developed.

A further HQ Directive 68/2016, dated 2nd November 2016, replaced HQ Directive 23/2016. This placed an obligation on the authorising member to print off an Incident Summary report in respect of each M.A.T./M.I.T. checkpoint carried out as well as directing the continuation of the practice of recording Dräger device serial numbers and readings in the narrative of all M.A.T./M.I.T. checkpoint PULSE incidents

An I.T. solution was implemented by way of PULSE Release 7.1 which became operational on 4th December 2016. An additional field was added within the M.I.T. statistics tab. This new field facilitated the recording of details from individual (Dräger) screening devices.

Figure 8: Screenshot of Screening Device Fields on PULSE



This field required mandatory recording of Dräger device serial numbers and individual device readings and meant that both could be attributed directly to an incident. This was the first stage of an organisation-wide I.T. solution, designed as a corporate governance measure to ensure the removal of the numerical disparities between PULSE and Dräger data going forward.

However, PULSE release 7.1 did not include a mechanism to logic check the Dräger device data, as it was manually entered, primarily by G.I.S.C. call takers nor did it include a report generation mechanism to enable higher-level governance. This PULSE release also continued to require members conducting checkpoints to gather unnecessary data for statistical purposes, i.e. "vehicles through checkpoint", "vehicles stopped and controlled", "time delay to motorists" and "weather conditions", etc.

On 26th May 2017, a direction from Assistant Commissioner, Roads Policing and Major Event/Emergency Planning (formerly G.N.T.B) was placed on the Garda Portal instructing members to stop recording the following: total vehicles passing through checkpoint, time delay to motorists and weather conditions.

PULSE 7.1 was also augmented throughout many Divisions with much more stringent monitoring of Dräger device movements. Registers have been implemented which require manual completion. Dräger devices must be signed in and out. Device readings must also be noted when

individual Dräger devices are signed out and again when they are returned to the station store. This process must be witnessed by the Sergeant on duty.

These are the present corporate governance structures which exist within An Garda Síochána. Interspersed amongst all the above-mentioned changes are the following; legislative change in the form of the Road Traffic Bill 2016 which replaced M.A.T. Checkpoints with M.I.T Checkpoints in December 2016. Also, on 17th May 2017, An Garda Síochána issued HQ Directive 28/2017, which was accompanied by comprehensive organisational policy document, titled: "An Garda Síochána Policy on Intoxicated Driving 2017".

10.4 Issue Encountered in Review of Current Processes

In order to examine whether the new governance structures which have been introduced were working, the examination team sought to compare breath test data recorded on the Dräger devices and M.A.T./M.I.T. checkpoints since the launch of 7.1. However this was not possible for the following reasons:

1. The cut off point for Dräger data for the purposes of this examination was 10th April 2017. This meant that data from these devices would only be available for a five month period.
2. Due to the method of recording Dräger data, compilation of same from the commencement date of 4th December 2016 requires formulaic calculation. While this process can be applied with relative accuracy to longer periods, the level of accuracy decreases significantly when the process is applied to short time-frames.

As a result, it was considered not to be a worthwhile process as cumulative breath test data from Dräger devices is not available for comparison with PULSE data.

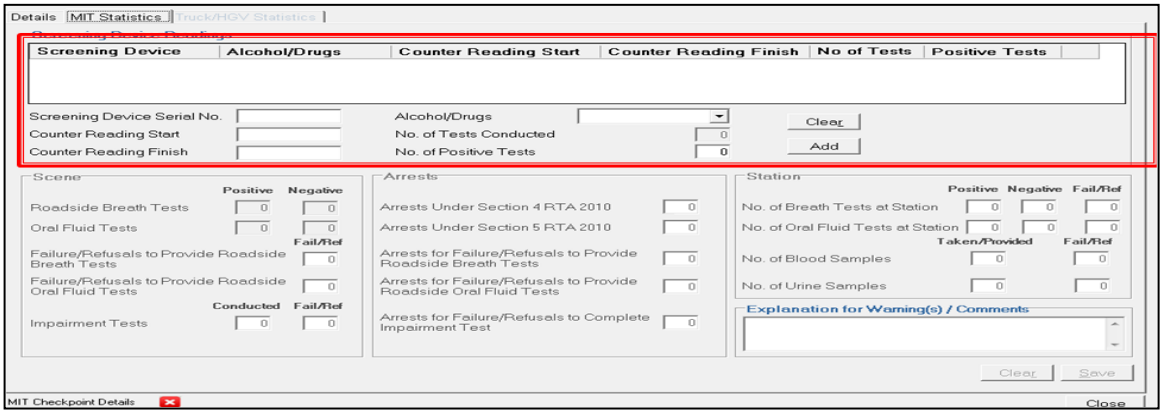
10.5 Future Governance Structures

On 13th August 2017, a second and more comprehensive I.T. solution will be implemented by way of PULSE release 7.2. This upgrade will consist of two primary components: simplification of the data recorded and imposition of stringent governance procedures in relation to the

recording of breath test data. As part of this examination, details of this upgrade were sought from and provided by Roads Policing and Major Event/Emergency Planning.

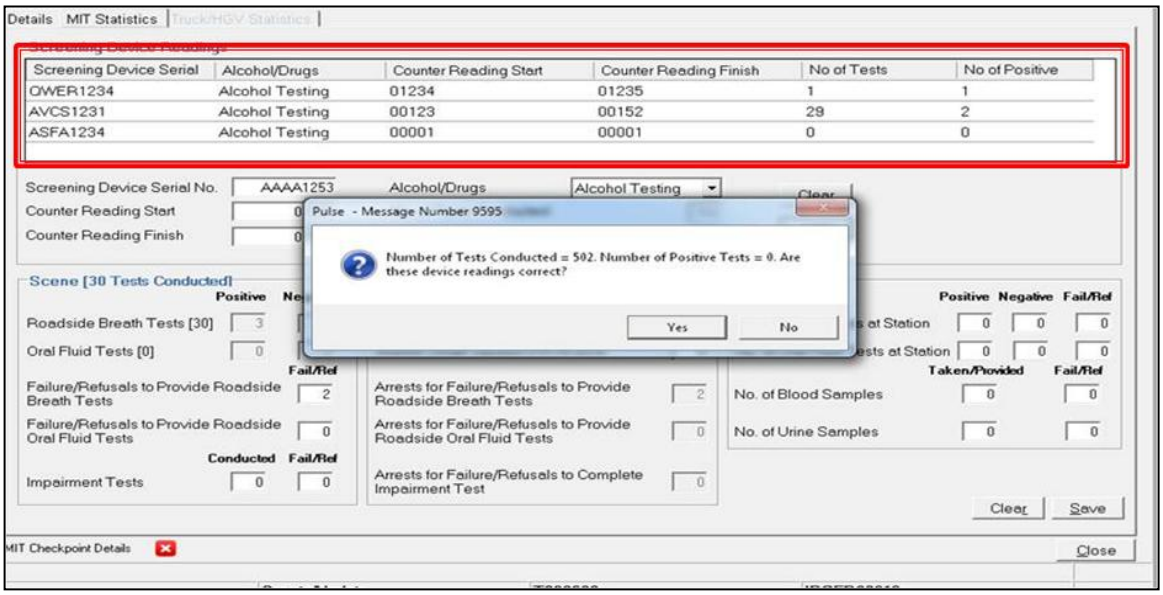
One of the simplest, yet most important, changes to be made is that the M.I.T. statistics tab is scheduled to be redesigned to capture only breath test information which aids governance and reduces corporate risk from a statistical gathering perspective. Data fields like "vehicles through checkpoint", "vehicles stopped and controlled" and "time delay to motorists", etc. will be removed. The focus will be exclusively on screening device data and the number of positive breath tests performed. The area highlighted in RED, below, shows that all PULSE breath test data will be derived from Dräger device readings following this PULSE Release. See **Figure 9**.

Figure 9: New Screening Device Screen



This PULSE release will include a logic check, which highlights readings which the system recognises as inconsistent with other information inputted. This is intended to limit human error within the data imputing process. Where PULSE detects that data inputted appears incorrect or inconsistent; a user message will appear asking the data inputter "are the device readings incorrect?" See **Figure 10**.

Figure 10: User message "are the device readings correct?"

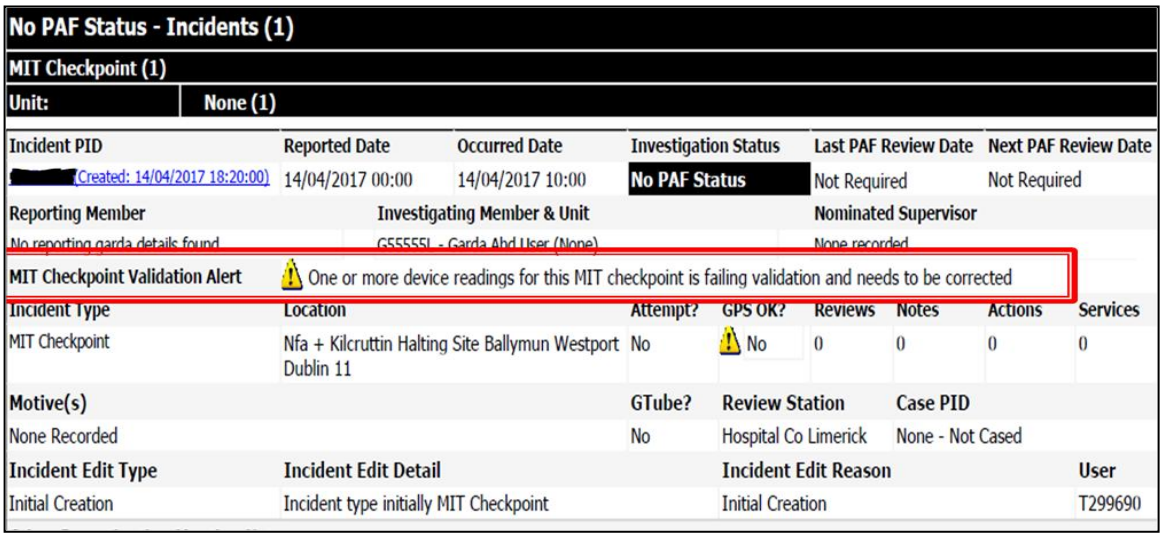


If the data inputer enters data which appears incorrect and/or in circumstances where PULSE detects that the start counter reading **is less**[9] than the previous finish counter reading, then there will be three separate responses triggered.

Firstly a review/clarification notice will be activated on the incident itself. This will result in the incident automatically moving to the investigating member's USER TASK box on their PULSE browser screen. Secondly, an email notification will be sent to an Authorising Inspector. Finally, the numerical anomaly will flag on the new M.I.T. checkpoint report (RPT_OPRET001A), the new Dräger Device Report and (as highlighted hereafter) it will show up on the Daily P.A.F. Incident Report (see **Figure 11**) which will bring it to the attention of the District Officer who is responsible for the area in which the M.I.T. checkpoint is performed.

[9] **Note –** This fix triggers the response outlined only when the Dräger start reading **is less** than the previous finish reading and not when the start reading **exceeds** the previous finish reading recorded on PULSE. This is because the Dräger in question may have been used in the intervening period to conduct a breath test outside of a M.I.T checkpoint, i.e. at a Road Traffic Collision. An Garda Síochána does not presently possess a specific mechanism for recording such breath tests on PULSE

Figure 11: Daily P.A.F. Incident Report



No PAF Status - Incidents (1)

MIT Checkpoint (1)

Unit: None (1)

Incident PID	Reported Date	Occurred Date	Investigation Status	Last PAF Review Date	Next PAF Review Date
[redacted] (Created: 14/04/2017 18:20:00)	14/04/2017 00:00	14/04/2017 10:00	No PAF Status	Not Required	Not Required

Reporting Member	Investigating Member & Unit	Nominated Supervisor
No reporting garda details found	G55555L - Garda Abd User (None)	None recorded

MIT Checkpoint Validation Alert: ⚠ One or more device readings for this MIT checkpoint is failing validation and needs to be corrected

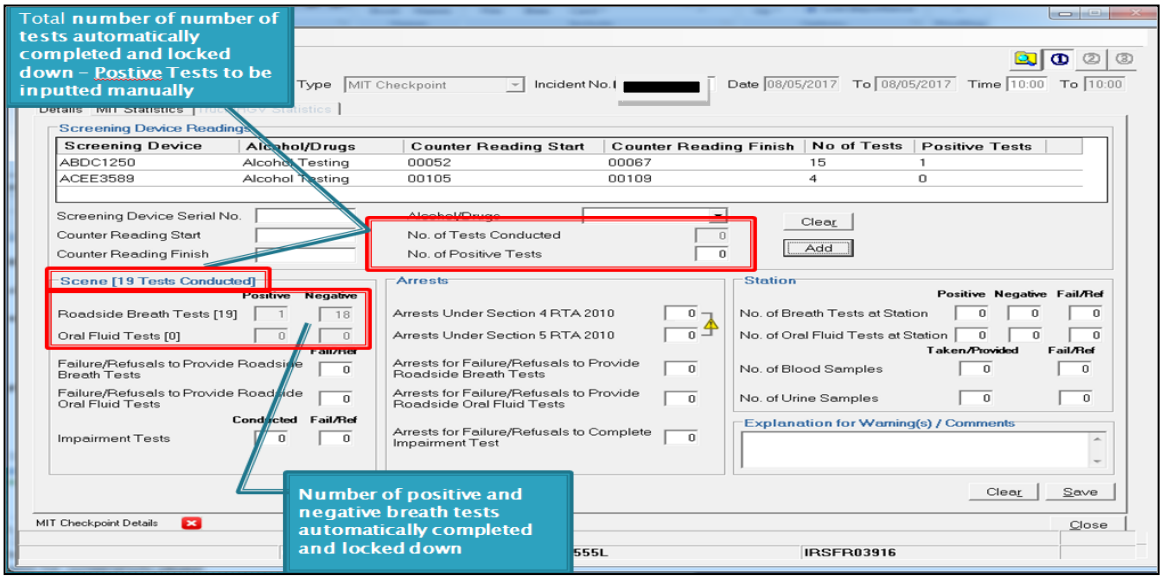
Incident Type	Location	Attempt?	GPS OK?	Reviews	Notes	Actions	Services
MIT Checkpoint	Nfa + Kilcruttin Halting Site Ballymun Westport Dublin 11	No	⚠ No	0	0	0	0

Motive(s)	GTube?	Review Station	Case PID
None Recorded	No	Hospital Co Limerick	None - Not Cased

Incident Edit Type	Incident Edit Detail	Incident Edit Reason	User
Initial Creation	Incident type initially MIT Checkpoint	Initial Creation	T299690

Once the Dräger device data is validated and entered, it will be locked down and both the "No. of tests conducted" and the "Roadside Breath Tests" screen will automatically populate. The data inputter will then be required to manually enter the number of positive breath tests. See **Figure 12.**

Figure 12: Screenshot of New Lockdown System



The changes which will be implemented as part of PULSE release 7.2 appear to have a number of "checks and balances" which will significantly enhance the governance processes in relation to the accuracy of recording breath test data. Furthermore, the I.T. solution recognises the issue of human error in the data inputting process and contains a validation process to prevent same as incidents are created. It also ensures that where corrective action is not taken that alerts are issued to a number of different parties, of varying ranks. This should ensure that assertive action is taken to rectify any numerical anomaly identified.

10.6 Review of Future Governance Processes

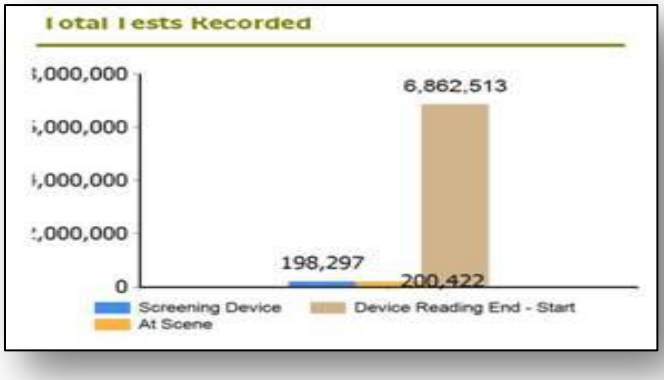
It was mentioned previously in this chapter that efforts were made as part of this examination to determine whether the reactionary solutions, implemented in response to the discovery of the numerical anomalies which are subject of this report, were working effectively. The primary solution was the addition of a mandatory field on M.I.T. checkpoint incidents compelling members to record Dräger device serial numbers and readings. Given that this solution doesn't afford any choice, it has been effective. It has also served to consistently reinforce, to individual members, the corporate responsibility imposed on An Garda Síochána to collect and provide accurate statistical data.

Building on the requirement to record Dräger device data, a new M.I.T. checkpoint report (RPT_OPRET001A) which collates and graphically displays this information, forms part of PULSE release 7.2. This report is now live on PULSE. It was considered that this M.I.T. checkpoint report would provide an opportunity to conduct some level of examination regarding the accuracy of breath test information now being recorded.

It is important to note that this report is not yet in general use within this organisation as no instruction regarding the release of PULSE 7.2, or this report has been issued within An Garda Síochána. It is recognised that this report includes only Dräger device data manually inputted on PULSE. Despite this fact, it was considered that this report could potentially provide relevant information. In the first instance, it would provide an indication of the total number of breath tests carried out in any specified period and secondly, that breath test data was being inputted correctly.

A M.I.T. checkpoint report was generated between the period of the 1st January – 30th June 2017. The results showed that the overall number of breath tests for the period appeared consistent with previous years. However, it was obvious that the number of breath tests which PULSE was calculating directly from data manually inputted into breath test "Device Reading End-Start" field was showing a large disparity compared with the two other measurables in this report. Both of these were calculated from the number of actual breath tests conducted, which are manually inputted. The level of numerical discrepancy suggested that typographical errors were being made in the manual recording of the Dräger device readings, resulting in the numerical disparity outlined in **Figure 13.**

Figure 13: Numerical Discrepancy between Dräger Device Readings and PULSE



A more detailed report was immediately sought from I.A.S. This report very clearly confirmed the suspicion that typographical errors were being made when the data was being inputted. Some examples of the typographical errors and their impact are outlined in the table hereunder:

Table14: Examples of Typographical Error

Incident	No. Of Breath tests	Device Starting Reading	Device End Reading	Number of Breath Tests recorded on PULSE	Inc created by	Present Review Status of Incident
1	**15**	2598	02612103	**2,609,505**	GISC	Auto Reviewed
2	**5**	01608	101613	**100,005**	GISC	Auto Reviewed
3	**3**	05585	085582	**80,003**	GISC	Auto Reviewed
4	**1**	07231	072234	**65,003**	GISC	Auto Reviewed
5	**2**	5206	52047	**46,842**	GISC	Auto Reviewed
6	**8**	05024	050248	**45224**	GISC	Auto Reviewed
7	**1**	04698	046999	**42301**	GISC	Auto Reviewed
8	**10**	00911	11915	**11010**	GARDA	Auto Reviewed
9	**1**	01128	011298	**10170**	GISC	Auto Reviewed

10	**2**	04954	09456	**4502**	GISC	Auto Reviewed
11	**26**	04385	08398	**4026**	GISC	Auto Reviewed
12	**28**	5081	8091	**3028**	GISC	Auto Reviewed
13	**25**	01315	03122	**1825**	GISC	Auto Reviewed
14	**2**	05287	05689	**402**	GISC	Auto Reviewed

It is apparent that these typographical errors, which had only occurred in a relatively small percentage of incidents recorded, possess the potential to have a very significant effect on the quality of the breath test information recorded. This issue was further exacerbated by the fact that M.I.T. checkpoint PULSE incidents are presently auto reviewed after they are created, meaning that no systematic or manual quality control check was conducted. This issue has now been resolved and, as outlined above, this will not happen when PULSE release 7.2 is implemented.

One further future development is likely to have an impact on improving governance in relation to gathering and compiling accurate breath test data. A tender process for more sophisticated and modern alcohol screening devices has begun. This is being carried out via the M.B.R.S. It is envisaged that these devices will contain a G.P.S. facility and have downloadable capabilities which will enhance the ability to compile and collate more accurate statistical breath test data.

10.7 Conclusion

This examination has reviewed the corporate governance structures which existed at the time that conflicting breath test data emerged into the public domain, those which were put in place as an immediate response to this issue and those which will be implemented in the near future. An Garda Síochána has migrated from an organisation which possessed no coordinated mechanism to identify the numerical anomalies which emerged between Dräger and PULSE data, to a position where an I.T. solution will shortly be deployed to enable a much more robust level of corporate governance and local management supervision.

Issues were identified with the present governance structures. It must be highlighted that these measures were put in place as transitionary mechanisms to contain an issue, the cause of which was still to be determined. However, on a positive note, the numerical issue which arose did show that the future governance structures which will be implemented as part of PULSE release 7.2 will be effective in preventing a reoccurrence of this nature.

The issue of recording breath tests was raised in this chapter and this practice questioned. The one issue which is striking in relation to the current and future governance structures is that there are resource factors associated with each, in recording breath test data in the first instance and ensuring its accuracy thereafter. This may appear a relatively minor cost in respect of an individual M.I.T. incident. However, when this issue is viewed as an organisational collective, it begs the question; Is the collection of breath test data a worthwhile process which merits the associated costs, particularly in terms of resource utilization? This examination process has not uncovered any details to indicate that it is. The risks associated with such collection, given the errors that arose in 2017 support the view that this is not a worthwhile process.

11. Findings

11.1 Overview

As outlined previously, the terms of reference for this examination was to review the processes and procedures in place for the recording of breath tests at M.A.T./M.I.T. checkpoints, and to conduct a detailed analysis of the statistical information. The latter proved to be a much more difficult task than initially anticipated. The statistical analysis has determined that there were 1,458,221 more breath tests recorded on PULSE than on Dräger devices over the period from the 7th June 2009 to the 10th April 2017.

This examination was established by Deputy Commissioner, Policing and Security, following the discovery of conflicting breath test data. This process identified a number of individual and interlinked factors which contributed to this numerical disparity. Notwithstanding the contributing issues highlighted in this report, it is inevitable that the inflation of breath tests was a contributing factor that led to the disparity in breath test figures.

Given that breath testing of drivers is a key element of An Garda Síochána's roads policing strategy and impacts directly on enforcement of drink driving legislation, intentional inflation of breath tests must be regarded with the utmost seriousness. Equally important though, to both members of the public and to the members of An Garda Síochána who carry out their duties with diligence and professionalism, is that this examination sought to establish; how many breath tests were intentionally inflated, was there any reason why this had occurred, and how, had it been allowed to happen.

11.2 Summary of Findings

There is, in reality, one broad finding which has emerged as part of this examination process. That is, circumstances existed which enabled, allowed and/or facilitated a practice to develop where some personnel failed to appreciate the importance associated with breath test data. The challenge within this process was to determine the effect of this culture and its actual impact on the gathering of breath test data. It was important to identify whether the findings suggested a system compromised by reckless data recording errors, or one where identifiable elements are

engaged in the deliberate inflation of breath test data for perceived benefit or to satisfy management pressure or for some other unknown reason.

In order to address these matters further, the findings made actually begin at the PULSE data recording stage, journey through the process of breath test data collection, and finally, determine the impact of management and governance structures. An overall summary of the findings of this examination is outlined hereunder:

Table 15: Summary of Findings

Category	Summary of Finding
Recording Issues that Contributed to inflation of breath tests*	Between 7% and 13% of M.A.T./M.I.T. checkpoints recorded on PULSE between the 1st July 2010 and 10th April 2017 are estimated to contain recording errors, based on the 95% confidence interval and 3% margin of error. This translates into between 35,191 and 65,355 checkpoint incidents containing recording errors. The pre-entry of zero in the breath test data fields resulted in 3,528 additional breath tests being recorded that did not occur, over the examination period.
	The instruction that "vehicles stopped and controlled" should equal the sum of breath tests, including failed and refused, might have led to the inflation of the number of breath tests recorded on PULSE. The full effect of this, however, cannot be quantified. This was primarily due to unclear data fields on PULSE "M.I.T Statistics" tab in addition to a lack of coordinated training and policy between Gardaí and G.I.S.C.
	Garda members were required to gather and collate too much statistical information to enable correct completion of PULSE M.A.T./M.I.T. checkpoint incidents.
Suspected Inflated Breath Tests Identified*	Between 3% and 9% of checkpoints recorded on PULSE between the 1st July 2010 and 10th April 2017 are estimated to contain inflated breath tests, based on the 95% confidence interval and 3% margin of error. This translates into between 15,082 and 45,246 checkpoint incidents, with the number of inflated breath tests estimated to range between 106,177 and 318,530 breath tests.*
Reasons Garda Members inflating Data on PULSE	Garda members estimated numerical data when creating M.A.T./M.I.T. checkpoint incidents.
	Over ambitious scheduling of M.A.T./M.I.T. checkpoints set by local management was a factor in some Garda members inflating breath test numbers.
Factors which allowed this to happen	Capacity deficiencies in front line supervision was a significant issue.
	Absence of clear policy and procedure in relation to statistical breath test data was an issue – resulted in weak corporate governance structures and no operational guidance.

* ***These figures are not mutually exclusive***

11.3 Recording Issues

Between 7% and 13% of M.A.T./M.I.T. checkpoints recorded on PULSE between the 1st July 2010 and 10th April 2017 are estimated to contain recording errors, based on the 95% confidence interval and 3% margin of error. This translates into between 35,191 and 65,355 checkpoint incidents containing recording errors.

The pre-entry of zero in the breath test data fields resulted in 3,528 additional breath tests being recorded that did not occur, over the examination period.

(The figures are not mutually exclusive)

The pre-entered zero in the breath test data fields had a marginal impact on the inflation of breath test figures on PULSE. However, the impact of other types of recording errors on the number of breath tests recorded is unclear. The main recording error identified during data analysis was the fact that every vehicle was stopped when a random selection method had been specified at the outset. While not adhering to the pre-determined order of selecting motorists does not mean that the rest of the figures are incorrect, it nevertheless sheds doubt on their reliability. That is, it is not clear whether members really had stopped all the vehicles passing through the checkpoint or whether there was a misunderstanding of what information should have been recorded in the "vehicles stopped and controlled" and other fields under the "M.I.T. statistics" tab on PULSE. Based on the feedback received as part of this examination, there was confusion, at least among some of the members, in relation to these fields, which makes the overall reliability and validity of the information recorded questionable.

Recording errors also raise concerns in relation to the reasons why these errors occurred. It calls into question the volume and range of data fields on M.A.T./M.I.T. checkpoint incidents, as well as the level of attention which is applied during the data entry process and quality control mechanisms applied thereafter.

The instruction that "vehicles stopped and controlled" should equal the sum of breath tests, including failed or refused, might have led to the inflation of the number of breath tests recorded on PULSE.

This was primarily due to unclear data fields on PULSE in addition to a lack of coordinated training and policy between Gardaí and G.I.S.C.

The "vehicles stopped and controlled" issue has been well documented throughout this examination. The data field, by its title is open to interpretation. By definition it is the sum of all breath tests conducted, including failed and refused. However, all breath test data is captured in other tabs and so it essentially serves no purpose. It was evident in the field work, submissions received from various Garda ranks and from listening to telephone calls at G.I.S.C. that there was widespread confusion surrounding this data field. Based on a review of policy documents it appears that G.I.S.C. personnel were provided with the definition in writing in 2012, although incidents prior to this date exhibit high compliance rates with the instruction. It seems Garda members were not provided with a definition until April 2016.

This examination has determined (based on the analysis of six months of incidents from the 1st half of 2012) that compliance with the instruction that "vehicles stopped and controlled" should equal breath tests conducted, including failed and refused, seemed to be responsible for marginally increasing breath tests in the sample, by 1,026 or 0.42%. It is important to stress that this analysis related only to the incidents which had been subject to a review type by G.I.S.C. With 93% of all M.A.T./M.I.T. checkpoint incidents complying with the instruction over the 2010 – 2017 period, a greater concern was whether breath tests might have been inflated during the incident creation process, as a result of matching the figures between the "vehicles stopped and controlled" and breath test fields.

During the Divisional and District field visits it was mentioned that some G.I.S.C. staff were not actually asking Gardaí how many breath tests they had conducted. The information provided indicated that data inputters were only requesting the total number of "vehicles stopped and controlled" and if there were any positive tests. Failure to ask about the number of motorists that had been breath tested, and presuming that the number of vehicles stopped and controlled equaled the number of breath tests, including failed or refused, might have led to the inflation of breath tests on PULSE at the point of data entry. It essentially meant that G.I.S.C. personnel may have

unintentionally inflated breath test data to comply with GISC internal policy that very clearly defined what was meant by total "vehicles stopped and controlled".

This was confirmed during a field visit to G.I.S.C. in June 2017. Calls were examined in which call takers never specifically asked Gardaí how many breath tests they had carried out. The only information requested was the total "vehicles stopped and controlled" and if all the breath tests were negative. This meant that there was a possibility that breath test data was being inadvertently inflated during the live data entry process.

The examination concluded that no reliable determination could be made on the impact that this instruction had on breath test figures. The only means by which this can be accurately established is to listen to each individual G.I.S.C. recording relating to the creation of M.A.T./M.I.T. checkpoint incidents, a task this examination was not resourced to carry out. The only finding which can be made in relation to this matter is that, as a policy practice with very high compliance rates amongst data inputters, it is likely to have contributed to some degree of inflation of breath test data on PULSE.

Members were required to gather and collate too much Statistical Information to enable correct completion of PULSE M.A.T./M.I.T. Checkpoint Incidents

It has been outlined, previously within this report, that M.A.T./M.I.T. checkpoints were a simple concept complicated by peripheral factors. One such peripheral factor was the collection of the statistical data necessary to complete the checkpoint tab on PULSE incidents. A member of An Garda Síochána conducting a checkpoint was expected to gather and record numerous amounts of data.

The value of all this information is questionable. Even more significantly, from a cultural development perspective, is that much of the information requested could only be estimated or guessed. An example of this is recording the time delay to motorists or the number of vehicles passing through a checkpoint. It would be extremely difficult for any member to perform this function while engaged in the process of breath testing a motorist. The net effect is that the tabs cease to have value, particularly where no understanding exists as to why the information is relevant. Once this occurs the only option is to engage in estimation. Once widespread estimation enters a data collection process any statistics that emerge are likely to be inaccurate.

11.4 Incidents with Inflated Breath Tests

Between 3% and 9% of checkpoints recorded on PULSE between the 1st July 2010 and 10th April 2017 are estimated to inflate breath tests, based on the 95% confidence interval and 3% margin of error. This translates into between 15,082 and 45,246 checkpoint incidents, with the number of inflated breath tests estimated to range between 106,177 and 318,530 breath tests.*

The process of identifying each individual checkpoint incident with inflated data on PULSE would necessitate an examination of all 523,198 checkpoints on PULSE, along with the interviewing of all Reporting Gardaí. This was not feasible given the resources available to this examination.

In order to identify M.A.T./M.I.T. checkpoint incidents which have inflated breath tests, a random sample of 2,136 incidents were examined along with all incidents with 50 or more breath tests recorded. From the examination of incidents with 50 or more breath tests recorded, 1,984 checkpoint incidents were identified to contain inflated breath test figures, along with 150 specific checkpoint incidents from the random sample**.** There were three of the same incidents present in both samples so in total 2,131 incidents were identified with 69,644 inflated breath tests. A course of action in respect of these incidents will form part of the recommendations within this report.

Based on the findings from the random sampling, the overall number of inflated breath tests across the entire number of checkpoints recorded on PULSE between the 1st July 2010 and 10th April 2017 is estimated to range between 106,177 and 318,530 breath tests, based on the 95% confidence interval and 3% margin of error.

The question is likely to arise as to why no further action was taken by this examination team to carry out a more intrusive examination into the suspicious breath tests identified above. There is a very simple reason for this. It would appear that where deliberate inflation of breath test data is identified on any PULSE M.A.T./M.I.T. checkpoint incident, then the matter would enter the disciplinary sphere. An Garda Síochána has specific regulatory structures governing this process and this examination is not empowered under any such regulations.

The examination team was made aware of three incidents which alleged that the Gardaí were falsifying breath test data. One allegation was in relation to the Gardaí falsifying breath tests. Another incident referred to a Garda member recording a M.I.T. checkpoint incident on PULSE that had not been carried out. Both of these matters are presently subject to due process and therefore cannot be commented upon further in this report. The third incident was notified anonymously through channels outlined in the overview of this report.

11.5 Reasons Garda Members Inflated Breath Tests on PULSE

Garda members estimated numerical data when creating M.A.T./M.I.T. checkpoint incidents.

This report has already commented upon the volume of information that members conducting M.A.T./M.I.T. checkpoints were required to gather and the likely impact of same on compiling accurate data, particularly where large scale checkpoints were conducted. The effect of this resulted in Garda members estimating figures. The reality is that there was no rationale apparent to individual members for the collection of this data. Therefore, it was considered an irrelevant task which had no value to the overall process of conducting a M.A.T./M.I.T. checkpoint.

Chief Superintendents, in their submissions to this examination, have questioned why An Garda Síochána are recording this information, as have the G.R.A. It has been outlined that none of the external Police services visited place any reliance on negative breath tests and this appears not to have impacted in any way on their operational functionality in enforcing relevant legislation. The collective view appears to mirror the findings of this examination process, that there is simply no rationale for collecting and recording breath test data.

The only data considered relevant to any member of An Garda Síochána, at operational level, were positive breath tests and this was clearly evident when calls were reviewed at GISC.

Another factor facilitating estimation was that no training or instruction was provided indicating either the importance which was being placed on breath test data or how to accurately record breath tests until 2016. In April of that year, a Policy document issued instructing Garda

personnel to use the counter reading on Dräger devices and to document it on a paper M.A.T. checkpoint return form.

Over ambitious scheduling of M.A.T./M.I.T. checkpoints by Local Management was a Factor in some Garda Members Inflating Breath Test Figures

M.A.T./M.I.T. checkpoints rightly form an integral part of each Divisional and District Officers approach to reducing road traffic collisions by enforcing drink driving legislation and detecting breaches of lifesaver offences. However, during a period where there was a significant reduction in manpower and supervision, many Districts continued to schedule similar or increased numbers of M.A.T./M.I.T. checkpoints.

It appears that no structured processes were put in place within any District or Division to determine capacity to carry out M.A.T./M.I.T. checkpoints or to ensure that those being carried out were effective. It is clear from the available data that M.A.T./M.I.T. checkpoints were an extremely inefficient mechanism by which to detect drink drivers. However, M.A.T./M.I.T. checkpoints do have a preventative role and act as a deterrent for motorists against engaging in drink driving.

The numerical anomalies when one looks at individual Divisional breakdowns clearly shows that breath test inflation was a bigger issue in some Divisions more than others. This, in turn, supports the assertion that there were individual factors present in each Division where there were higher levels of inflation observed, given that the other elements identified by this examination (such as recording errors or potential inflation of breath tests due to misinterpretation of "vehicles stopped and controlled") would be expected to be consistent across the country.

This examination has found that by failing to review the capacity to carry out the number of M.A.T./M.I.T. checkpoints which were being set down for front line members, management were intentionally or inadvertently applying pressure and that this was a contributory cause which lead to the discrepancy between the PULSE and Dräger breath test figures.

A comment was made to members of the examination team which indicated that zero was not an acceptable management statistic and this may have been a perception held by many Garda

members. By scheduling excessive amounts of M.A.T./M.I.T. checkpoints, managers were putting pressure on members to do them. It has also been suggested that members of An Garda Síochána felt that they were expected to increase the number of M.A.T./M.I.T. checkpoints/breath tests by whatever means possible and this may have led to the deliberate inflation of breath tests.

11.6 Factors which allowed Breath Test Inflation to occur

Capacity Deficiencies in Front Line Supervision was a Significant Issue

The field visits carried out as part of this investigation found that lack of supervisory capacity was almost universally cited as a major issue for District Officers. It meant that they were completely reliant on unsupervised members to carry out M.A.T./M.I.T. checkpoints and then to gather and input all related data. Submissions from the G.R.A. provided the view from the perspective of members of that Association. This indicated that their members feel they are operating in isolation and that there is no supervisory back-up support.

The statistical data gathered from H.R.P.D. indicates that there has been a fall of 6% in the number of Sergeants within the organisation of An Garda Síochána over the last number of years. This number fails to take account of the dilution in front line supervision which occurred with the introduction of the new Garda Roster. There is a significant deficiency in operational Sergeants supervising members providing front line services in An Garda Síochána. Such a deficiency would lead to issues in any large organisation and An Garda Síochána is no different.

Absence of Policy and Procedure in relation to Statistical Breath test data was an issue – Resulted in weak Corporate Governance Structures and no Operational Guidance

An Garda Síochána, as a large cooperate body with operational functionality throughout Ireland, is heavily reliant on policy and procedure to ensure consistency in service delivery. There is little doubt that there are many policies and procedures guiding every element of the diverse range of functions carried by An Garda Síochána. Significant amounts of policy and procedure also create an issue, from a corporate governance perspective, to ensure it is effectively communicated and implemented.

There are a number of policies and procedures relating to M.A.T./M.I.T. checkpoints which are intended to guide members when conducting same. Despite the difficulty accessing these, it appears that these documents have permeated throughout the organisation. There is generally a degree of standardisation surrounding the conduct of M.A.T/M.I.T. checkpoints throughout the various Garda Districts and Divisions. This displays that An Garda Síochána has the capacity to ensure that governance policy and procedures transition into operational functionality. These policy documents did not specify how or why the data was to be collected. In April 2016 this was addressed with the issue of HQ Directive 23/16.

The result was systems shortcoming whereby the data gathering process lacked any intrusive input from management. This was compounded by the fact that there was inadequate governance to ensure the accuracy of the breath test data being recorded on PULSE and specifically; that it should correspond to the number of breath tests being recorded by Dräger devices.

11.7 Conclusions

The findings made, as a result of this examination, are that the process of gathering, recording and collating breath test data on PULSE was compromised by a number of separate factors. Peripheral issues, such as, lack of technology, supervision and governance structures, which would ordinarily act as barriers to the actions identified were weak and could be improved. These weaknesses were compounded by a lack of recognition regarding the level of importance which the organisation was attaching to PULSE breath test data. This enabled a system to develop at the core of the data gathering process whereby breath test numbers were inflated, frequently estimated and/or recorded in a manner which was not to the standard expected.

This examination has highlighted variations in the disparity of breath test data amongst Garda Divisions, but identifying the causes of these variations has been inconclusive. In order to advance that aspect, it would entail a forensic review of over 500,000 incidents requiring the allocation of significant resources over a prolonged period of time which ultimately may not reach a conclusive finding.

12. Recommendations

12.1 Overview

The contribution of M.A.T./M.I.T. checkpoints to ensuring the safety of all road users since their introduction is beyond question. Indeed, the contribution of these checkpoints was recognised in the 2008 report from the Garda Inspectorate. That report also highlighted shortcomings in relation to policy, resourcing, training, technology and data, and made appropriate recommendations. Many of the deficiencies in these areas still exist today and contributed to what transpired in relation to breath test recording.

This examination has identified a number of peripheral issues which led to the differential in data which arose between the numbers of breath tests recorded by Dräger devices compared to those recorded on PULSE. It also found that the impact of these matters did not account for all of the numerical variance. It is an inescapable conclusion that much of this statistical anomaly occurred as a result of inflation of PULSE data by members of An Garda Síochána.

It is suggested that where incidents are identified with questionable data, these could be subject to further review under the processes set down by the Garda Síochána Discipline Regulations. It has been highlighted elsewhere in this report that such enquiries must follow the course set down by statutory provision. Recommendations are made in relation to more detailed examination and/or investigation of incidents identified with implausible breath test data.

The other recommendations made, focus on addressing operational and procedural deficits. These are intended to ensure that, going forward, there is integrity in every aspect of conducting M.I.T. checkpoints and the accurate recording of relevant data thereafter. What constitutes relevant data is a particularly important subject for consideration. The practice of recording breath tests has been consistently questioned within this examination process and it is a matter which needs to be given serious deliberation. This is also addressed within these recommendations.

12.2 Recommendations

- The data and results of this examination will be used to inform Regional and Divisional managers of the M.A.T./M.I.T. incidents which reveal suspicions of inflated breath tests. It is the responsibility of the Regional Commissioners and Divisional Officers to have each incident identified fully investigated, from a disciplinary perspective if it meets the required threshold.

- An organisation wide instruction should issue to management, at every level, advising of the need to be realistic in relation to the number of M.I.T. checkpoints scheduled and that these should be subject to review to ensure effectiveness of local checkpoint strategies and capacity to carry out same. It is the view of this examination that too many M.A.T./M.I.T. checkpoints were scheduled.

- There should be a complete and comprehensive review of data collected by An Garda Síochána. The collection of data which has no relevance to policing should be dispensed with. Data is an organisational risk and the data collected should be reduced to mitigate this risk. Data on M.I.T. checkpoint incidents should be refined to essential data, which it is suggested is confined to POSITIVE results only.

- The recording of breath tests by An Garda Síochána should cease on the introduction of new Dräger devices.

- While MAT/MIT Checkpoints fulfill an important preventative role in Roads Policing the number of breath tests conducted should not be used as a measure of enforcement in line with best practice elsewhere.

- There should be investment to ensure compatibility between I.T. and alcometer devices and also to reduce manual input in the data collection and collation processes; or preferably, to eradicate it completely. (Similar recommendation made in the Report of the Garda Síochána Inspectorate 2008, Recommendation 21 page 24.)

- Greater clarity to the role of G.N.R.P.B. to address the issue of dual reporting relationships at the District, Divisional and Regional levels and clearly define the roles

and responsibilities of the Traffic Units and management thereof. (Similar recommendation made in the Report of the Garda Síochána Inspectorate2008, Recommendation 2 page 15.)

- Roads Policing Policies and priorities should be reviewed and a process implemented to ensure consistent standards of delivery nationwide; supported by a comprehensive C.P.D. programme. (Similar recommendation made in the Report of the Garda Síochána Inspectorate 2008, Recommendation 9 page 19 and in the Report of the Garda Síochána Inspectorate 2015 page 29)

- Policies and Procedures should be communicated to Managers, Supervisors and Gardaí by way of brief, user friendly and easily accessible documents, such as brief instructional videos and/or "How to Guides".

- It is recommended that a system is put in place to ensure cohesion between all PULSE related policy documents issued by G.I.S.C. and An Garda Síochána.

- There should be joint training given to G.I.S.C. and Gardaí on all PULSE related matters and include operational role play e.g. M.I.T. checkpoints.

- It is recommended a Garda Inspector is reassigned to G.I.S.C. to provide clarity between frontline Gardaí and G.I.S.C. staff. The Inspector would also sample telephone calls to G.I.S.C. to ensure a "quality control" mechanism.

The recommendations outlined above are intended to address the deficiencies of the past and to ensure that the matters highlighted throughout this report do not re-occur in future. There is one particular theme which permeates throughout the recommendations made and which merit particular mention. It is that all are orientated towards limiting the capacity of manual inputs (into the process of collecting and collating breath test data) to inadvertently or purposely record inaccurate data.

Information Systems should be a support for the human resources within an organisation. In the case of compiling breath test data from Dräger devices and placing this same data on PULSE; the opposite is actually the situation. It is the Information Systems which are entirely reliant on

human support to ensure the accuracy of the data gathered. This reliance, in almost every element of the data recording processes, has consistently been shown not to be an effective method of compiling accurate statistical information.

The recommendations highlight the need to refine data collected and dispense with all collection practices in existence that have no relevance to roads policing. The number of negative breath tests conducted fall into this remit. An Garda Síochána's primary roads policing goal is to improve road safety and reduce the number of fatalities and serious injuries on irish roads. The collation of breath test data in relation to innocent motorists serves no purpose in achieving this nor does it accomplish any other functional goal.

Several other neighbouring Police services do not partake in the gathering of such data and solely record positive breath tests which result in the detection of drink drivers. The strategic goals in relation to this area of roads policing should be reviewed and the use of strategic operations should be considered as the primary method of enforcement as is the case with other services. These operations are employed far more than M.A.T./M.I.T. checkpoints are. They are viewed as a much more effective tool in tackling motorists driving under the influence of an intoxicant.

In the future An Garda Síochána should employ more strategic roads policing operations focusing on outcomes rather than outputs. The focus on data gathering should be confined to data that is essential to policing needs. Going forward, the organisation should ensure that the appropriate supporting mechanisms are in place to enable Garda members to accurately record data.