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# Improving Criminal Justice Data and Policy

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## **POLICY PAPER**

# **Improving Criminal Justice Data and Policy**

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*Abstract:* Criminal justice policy in Ireland is often criticised for lacking a robust evidence base. Increased knowledge about crime and criminal justice may act to enrich all types of criminological enquiry and policy formation. This paper explores the potential of large population registries, similar to those created in the health sector, to inform criminal justice policymaking. The paper looks at the importance of such data collection for criminal justice research and policy and the potential hurdles to its development.

### **I INTRODUCTION**

In the absence of strong datasets and well trained analysts, it is perhaps not surprising that evidence-based policy-making has not always been the norm in Ireland.

(National Statistics Board, 2003, p. 30).

**T**o be effective, economical and responsive to need, criminal justice policy needs to be based on robust and easily accessible evidence. This paper makes the case for the development of criminal justice population registries, akin to those which already exist in the public health arena, to give us a greater insight into the causes of offending, the distribution of crime, the way in which punishment is used, and the evaluation of governmental action in this area. These registries would collect anonymised data on the contact individuals have with the criminal justice system and link that information to

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other administrative databases in health, education, social protection, and elsewhere, in order to provide a comprehensive examination of crime and the effect of criminal justice policy, but also to provide another slant on the health of our population.

This paper describes the data gaps in Ireland, particularly in the area of linked data and discusses the effects of these absences. Some suggestions to remedy these gaps are then made, with the issues of data protection and legal restraints on data collection and sharing explored. The need for a unique identifier across criminal justice data is also examined in the context of the creation of a criminal justice population registry. The paper concludes with recommendations for the development of better data collection and sharing systems in the area of crime and justice.

### 1.1 *What is the Role of Criminological Research and Evidence?*

The question of improving data to improve criminal justice policy is not one without controversy within the criminological academy. There is a perennial debate within criminology as to what criminological research should be as well as what it should be for (for an overview of these debates see Loader and Sparks, 2011), with those engaged in self-consciously “evidence-based” or “experimental” criminology (Farrington and Welsh, 2007) and those who take a critical approach to notions of crime and responses to it, arguing that much research acts merely to cement the view that crime is only that which occurs at “street-level” (Carr, 2010), at particular odds.

If researchers had a clearer picture of economic and other indicators we would be able to feed both projects more effectively. The greater accessibility of data would lead to more equality between researchers. Access to data on criminal justice populations would no longer be so dependent on funding or indeed on the background and connectedness of researchers as very large datasets would be developed as a matter of course.

As well as fundamental debates about the role of criminological expertise, there is also the question of how any data is used in the formation of policy. To argue that better data leads inexorably to evidence-based policy is to do so naively and without an understanding of how policymaking works. As Loader and Sparks aver, the way in which evidence is used is not straightforward and policy-makers make decisions for many reasons (Loader and Sparks, 2011). Scholars have lamented the lack of engagement by policymakers with criminological expertise and the phenomenon of symbolic rather than evidence-based policymaking, arguing that criminal justice policy is often based on political convenience rather than substance (Jones and Newburn, 2007; Stolz, 2002; Tonry, 2004). Stevens’s ethnographic account of the use of evidence in policymaking (Stevens, 2011) shows that evidence is often used as

a tool to create persuasive stories to promote policies which conform to prevailing policy trends and which assist civil servants to form important connections within their career.

O'Donnell notes that the Irish State's "... in-house capacity for research is almost non-existent" (O'Donnell, 2011, p. 498), but that this may, in fact, have acted as a bulwark against the imposition of some of the more punitive elements of crime policy witnessed in jurisdictions where the research infrastructure is more developed, such as the United Kingdom and the United States of America. In O'Donnell's view, the stunted nature of criminology in Ireland may have acted to insulate the State from the excesses in criminal justice felt elsewhere.

Improving data may do little to shift political imperatives or how evidence (or its lack) is used in the service of other goals. However, it is also the case that the absence of data in Ireland has also acted to frustrate attempts to contest the policies which have been made. Improved data can facilitate those willing to take issue with those policies more effectively and convincingly. Taking full account of the concerns about the use of data, it is nonetheless considered that the creation of better data about criminal justice is worthwhile. However, the mechanics of creation give rise to a number of dilemmas.

## II CRIMINAL JUSTICE DATA COLLECTION IN IRELAND

Ireland does not have a good track record when it comes to the collection and publication of data relating to the criminal justice and, in particular, the prison system. As O'Donnell notes "... prior to 1995, the annual reports on prisons and places of detention ... were reasonably detailed, but often published so far in arrears that their value was severely curtailed" (O'Donnell, 2008, p. 121). Remarkably, during the years 1995 to 2000 no annual prison reports were published and when these were produced as a compendium, the figures given related only to the total number of committals. This is all the more worrying given that this period was one which witnessed fundamentally important decisions about prison policy. Kilcommins reports that a Cabinet Minister at the time described a proposed increase in prison spaces as having been come up with "on the back of an envelope" (Kilcommins, 2004, p. 238).

Poor quality data and unsatisfactory prison population projections are also implicated in previous government plans to build a 2,200 space prison at Thornton Hall in North County Dublin, which would be the largest prison in Ireland by a multiple of at least three (the most recent official figures show a prison population of 4,400 in 2010 (Irish Prison Service, 2011)). In 2005, prison

population projections were created by the Irish Prison Service, although it appears they only became publicly available in 2009, and the methodology used for these projections is not considered to be robust (Brangan, 2009).

Within the annual reports on prisons and places of detention published each year by the Irish Prison Service, the categories of sentence length and offence type are few. No information on the demographic profile of prisoners other than general details of age, gender, nationality and place of residence prior to imprisonment. In the case of nationality, the categories included are “Irish”, “UK” and “African” with no further nuance or detail. There is a breakdown by county where the information provided is the address given by those committed to prison.

The consequences for researchers in Irish criminal justice are serious and already documented (Bacik, 2002; Hamilton, 2005; O'Donnell, 2004, 2008; O'Mahony, 1996). The effects of an absence of a unit within the Department of Justice or an extensive research community within the state are difficult to test, but it seems persuasive to suggest that ignorance about the effect of policies, the formation of policy on “gut instinct”, or conviction, or on nothing particularly substantial at all, have contributed to the difficulty in discerning or indeed creating a set of principles to guide Irish criminal justice policy (see, for example, Kilcommins, 2004; O'Donnell, 2011; Rogan, 2011).

As far back as 1985, the Whitaker Committee reported that there should be a body to publish accurate prison statistics (Committee of Inquiry into the Penal System, 1985) and in 1993 the Law Reform Commission's report on sentencing recommended that sentencing statistics should be made available to judges and which could be used by legislators when deciding on sentencing policy (Law Reform Commission, 1996). Recently, the Irish Sentencing Information System, a pilot project undertaken by the Courts Service of Ireland, has made a database of hundreds of District and Circuit Court cases and sentences publicly available through its website, [www.irishsentencing.ie](http://www.irishsentencing.ie). This database contains information on the sentence received for those cases captured by the database and some basic information on the person sentenced, but the information is not always recorded consistently, not all information is present and the information is not presented in a way that makes it easy for the sentencing researcher to work on. There is no information given on whether the sample sizes for particular offences can allow for meaningful statistical analyses.

The Courts Service also produces an annual report on the throughput of the courts each year, using a Courts Case Tracking System. In the area of criminal justice, this report gives information on the type of offences and sentences received during the year (available at [www.courts.ie](http://www.courts.ie)). No data on the background of those sentenced are provided. Instead, the volume of

appeals, the outcome of appeals, the numbers of cases received and disposed of are reported. Information is also given on the type and length of sentence imposed as well as guilty and not guilty pleas.

Crime Statistics are collected and published by the Central Statistics Office (CSO, available at [www.cso.ie](http://www.cso.ie)) having been produced for several years by the Garda Síochána. This quarterly publication is the most robust and comprehensive of all the sources in Ireland, but its categories do not always follow legal definitions of offences and there is no way to link the data produced with that of any other source because of differences in definition of offences and the general inability to link data across the criminal justice system. The Probation Service also produces some statistical information, but again its publicly accessible information is not possible to link to those of other criminal justice agencies ([www.probation.ie](http://www.probation.ie)).

In 2002 the Government of Ireland established an Expert Group on Crime Statistics to examine and make recommendations on the collation and presentation of information relating to reported crime. This group was established because of limitations identified in the collection of crime statistics including poor timeliness, a lack of geographic breakdown of the published data, a lack of consistency in published data, poor methodological notes and unsatisfactory arrangements for publication (Statistics, 2004). Eventually, and despite the fact that the Expert Group did not recommend this approach, the Central Statistics Office took over the function of the collection and publication of crime data. The majority of the expert group had recommended the establishment of a Central Crime Statistics Unit within the Department of Justice, but this has never been acted upon. The minority stated its belief that the case for such a unit had not been made and was premature when the critical question of data quality had still not been addressed. The Central Statistics Office now contains a section which deals with crime statistics. In 2005 the then Minister for Justice indicated it would also be taking over the publication of prison statistics, but this has not happened (Dáil Debates, April 20, 2005).

When it comes to understanding who our prisoners are and the backgrounds they come from, for example, our knowledge is garnered from a small number of one-off studies. These studies have provided us with essential and rich data on where prisoners come from, go home to and the type of lives they have had prior to imprisonment. We know that the Irish prison population is characterised by poor educational achievements, socio-economic disadvantage (O'Mahony, 1997), homelessness (Seymour, 2005), high incidences of mental illness (Smith, O'Neill, Tobin, Walshe and Dooley, 1996), especially amongst women (Carmody and McEvoy, 1996) and physical disease, especially blood-borne viruses (Smyth, Barry, and Keenan, 2005). These

studies have shed much light on the hidden environment of the prison and have given us very valuable data on the nature of those we sentence to imprisonment.

While this is so, and the findings of these studies should not be underestimated, there are systemic barriers to conducting such research. In every case, those carrying out research on the prison population had to seek out specific datasets and examine sectors of the overall population, or in the case of the released prisoners in a study by O'Donnell *et al.* (2009) obtain access to a large dataset of prisoners held by the Irish Prison Service as part of the Prisoner Record Information System (PRIS). These authors have also given a unique insight into the socio-economic demographics of the communities to which prisoners in Ireland return (O'Donnell *et al.*, 2007). The PRIS dataset is extensive, but it is not publicly available and requires the consent of the Irish Prison Service to access it and use it. In the case of smaller scale studies, the researchers involved had to seek access to particular sections of the prison population or those released from prison. This is time-consuming, expensive and labour intensive. It also means that each study provides a "snap-shot" of a particular population or point in time, with no ability to link the data to other studies nor have we had any longitudinal studies which follow populations, tracking their outcomes over time.

The lack of adequate data is not, however, a problem unique to criminal justice in Ireland. The Council of Europe's Committee for the Prevention of Torture in its most recent report on Ireland stated "... the lack of any epidemiological information on the prison population hampers the ability to evaluate prisoners' real health needs as regards medical and nursing care". (CPT, 2011, p. 34).

The deficiencies in quantitative data are serious, but there is also a grave lack of qualitative data on the Irish prison population. As O'Donnell puts it: "[we know] little about [prisoners'] relationships with staff and each other, their anxieties for the future, how they experience the pains of confinement, and how discretion is exercised" (O'Donnell, 2008, p. 122). There is room for the Irish research community to turn its attention more closely and frequently to the criminal justice and prison systems, but with all the hurdles to getting accurate information on criminal justice in Ireland, such a task will always be onerous.

### III LINKING DATA: POPULATION REGISTRIES

Rather than relying on one-off surveys of crime and punishment, it would be far more efficient and productive for the data which state organisations

already hold to be made more widely accessible for the purposes of research. This would involve the creation of population registries which draw on a variety of administrative data similar to those pioneered in the area of public health. The accessibility of such data would also be likely to stimulate more interest in such research.

### 3.1 *Cross-matching and Linked Data*

In order to be able to create a database or criminal justice population registry, a number of hurdles must be overcome. The problem of a lack of linked data applies across the Irish criminal justice system and beyond. Currently Ireland has a number of disparate databases or population registries which contain information about a wide variety of indicators. Birth rates, family size and crime rates, for example, are all collected and disseminated by the Central Statistics Office. The Health Protection Surveillance Centre utilises the Computerised Infectious Disease Reporting system to manage the surveillance and control of infectious disease. The National Cancer Registry collates incidence, mortality, treatment and survival data relevant to all cancer.

While all these individual sources are useful in themselves, the difficulty lies in linking these blocks of information in order to be able to begin to see and establish patterns and links between all these indicators. This was criticised by the Expert Group on Crime Statistics in 2004 (Statistics, 2004) but little action has been seen since. As the majority of the expert group reported, each criminal justice agency:

[P]roduces its own statistics but ... at present there is no integration or linkage of data between those statistics ... For example, it is not possible to track offenders through the criminal justice system or to determine rates of re-offending generally by crime type or by type of criminal justice sanction. Similarly, the proportion of offenders who receive custodial sentences is currently unquantifiable, as is the probability of custody for particular offence categories and whether average sentence lengths have been rising or falling.

(Statistics, 2004, p. 46)

There is, however, recognition at an official level that there is the potential for improved data collection and linkage in Ireland (NSB, 2003a). The most recently available Strategy Statement of the Department of Justice for 2008-2010 refers briefly to another proposed "Data Strategy" which will set out the information and statistical needs of the Department (Department of Justice, 2008, p. 43).

When it is impossible to link data across the criminal justice sector, it is hardly surprising that there is no provision to link criminal justice data to administrative records from other government departments. The reasons for this are manifold, and no doubt a lack of administrative or political will is at issue as the lethargy in the creation of data strategy statements indicates. However, there are much broader potential hurdles in any attempt to cross match data be it in Ireland or elsewhere. Perhaps the most important of these relates to data protection.

The importance of data protection cannot be overstated, but there are ways to ensure the protection of individuals while ensuring that very valuable information can be collected and used for policymaking and research purposes.

#### IV DATA PROTECTION

The creation of linked datasets between criminal justice agencies and other state organisations which collect personal data raises a number of thorny legal and ethical principles about the use and disclosure of data. In Ireland, both domestic legislation through the Data Protection Acts 1988 and 2003 and under EU law through the Data Protection Directive 1995 (95/46/EC) (on which Irish law is now based) require protections to be put in place regarding the use of personal data. The retention of data about individuals must be justified to the Data Protection Commissioner, an office established to protect the data of individuals in Ireland.

Under the Data Protection Acts 1988 and 2003, data or information constituting data must be obtained and processed “fairly” (section 2(1)(a)). This requires that individuals providing personal information must be made fully aware of the identity of the persons collecting the data, the use to which the information will be put and the persons or category of persons to whom the information will be disclosed. Secondary or future uses not obvious to individuals at the time of the collection should be brought to their attention and the option to refuse to allow their information to be used in other ways given to them.

More generally, section 2 of the Data Protection Acts only allows data to be obtained for one or more specified, explicit and legitimate purposes and must be adequate, relevant and not excessive. These restrictions are removed if the data is being kept for statistical, research or scientific purposes. Most of the data for such a registry would come under the category of “sensitive personal data” defined under section 1 of the Act. Section 2 allows for sensitive data to be processed in order to obtain information for statistical, compilation and

analytical purposes in accordance with the Statistics Act 1993, although this applies in the medical context.

The question of data retention is also at issue here. Under section 2(1)(c) of the Acts, a data controller shall not retain personal data longer than is necessary for the purpose or purposes for which it was obtained. However, there is also an exemption under the legislation when the data is being kept for statistical, research or other scientific purposes and no distress or damage is or is likely to be caused to the subject, allowing for the build up of data over a period of years. In this regard, the use of routinely collected data will in most cases be less of a burden than participation in a series of one-off surveys in which such data must otherwise be collected.

Existing data protection legislation would seem to prohibit the creation of a criminal justice population registry of the kind envisaged by this paper. The provisions of the Data Protection Acts are aimed, in the research context, at individual studies rather than very large population based databases. As the European Union's Data Protection Working Party recognises, the EU Directive on Data Protection and Privacy is not a legal basis for processing personal data for public health monitoring, but rather processing for individual patient care and additional law within Member States is required to justify the latter (Data Protection Working Party, 2007).

If a database or registry is developed with a view to having population-wide coverage, an exemption from aspects of the Data Protection legislation must be obtained. This has happened in Ireland already, again in the medical context. The National Cancer Registry was established under the Health (Provision of Information) Act 1997 and is exempt from the Data Protection Acts. The Cancer Registry is publicly owned and collects information on cancers, including information on the age, sex, social class and area of residence of patients with cancer. The area of residence is coded to an electoral division and addresses are not made public. The Personal Public Service number is collected but not given to researchers.

While the Cancer Registry is a very useful source of information on the incidence of cancer and some data on the backgrounds of patients, the Cancer Registry does not itself link to other health databases nor to other potentially useful sources such as information on education or involvement with the criminal justice system. This absence has been recognised in the movement towards a Health Information Bill in Ireland which seeks to create a population registry on a much wider scale and across a large range of health indicators.

#### 4.1 *Who Should Hold the Data?*

The question arises as to the most effective repository for such a sensitive database. A number of options arise. The Department of Justice and Equality

could take control of the database or an entirely separate body could be established, as was the case for the National Cancer Registry in Ireland, which is run by a not-for-profit statutory agency. A distinction must be drawn here between a body established to hold a population registry linking administrative data from all government departments and agencies, which would provide linked data to researchers, and one which would act to link data across criminal justice agencies. The former requires a body which can process administrative data across departments, the latter a body to work within the criminal justice domain.

The majority of the Expert Group on Crime Statistics recommended that a separate body under the auspices of the Department of Justice should be established to hold and maintain all criminal justice statistical information. There is much to recommend this approach, as a dedicated body with criminal justice expertise would be a natural home for such data and would be likely to find it easier to encourage criminal justice agencies to work together. The demise of the National Crime Council has removed us of another potential repository which would have such relationships and understanding already established.

While any of these bodies have or had an expertise in criminal justice data and would be able to deal with all its various agencies, the underdeveloped statistical infrastructure in all of them means that we should not assume they are the best choice for the development of a large population registry which would link with all other government departments and agencies. A centralised repository which could take data from all departments is necessary for this particular task. The Central Statistics Office has a protocol on data protection in place, which has been approved by the Data Protection Commissioner (available at [http://www.cso.ie/aboutus/data\\_protocol/data\\_protection.htm](http://www.cso.ie/aboutus/data_protocol/data_protection.htm)). The CSO also has a clear policy on confidentiality and is governed by the Statistics Act 1993.

The National Statistics Board envisages the Central Statistics Office taking a central role in linking data across government departments (NSB, 2003b, p. 19). The CSO already has the responsibility for collecting data from a variety of agencies including, for example, information on crime statistics, migration, employment as well as the information obtained from the Census.

The majority of the Expert Group on Crime Statistics was concerned that the CSO was too remote from the agencies with which it would be dealing to act as the appropriate body to deal with criminal justice data. Another concern was that section 30 of the Statistics Act 1993 gives no legal basis for the CSO to seek records pertaining to criminal justice. These concerns are valid when

it comes to linking criminal justice data across the various agencies involved, but can be alleviated.

There are many advantages to having a dedicated body within the Department of Justice which is responsible for the development and use of statistics in the criminal justice area. The understanding of what is required for policy and the potential use of the data recorded is likely to be most developed within the Department. The Central Statistics Office has a greater capacity for linking between the various government departments and for holding the data on an anonymised but linkable basis.

There are compelling arguments for improving the statistical infrastructure of the Department of Justice and Equality and also pragmatic reasons to allow the Central Statistics Office to act as the hub linking the various government departments. Ideally, the Department of Justice and Equality should develop a specialised statistical unit, which could also improve capacity in the various agencies such as the Probation Service and Prison Service, which would use the centrally held information as required. This body could then provide properly linked data to the Central Statistics Office in order to allow those data to be linked to other sources and to create a registry which permits research across the whole population and a wide range of indicators to be carried out.

## V HOW TO LINK DATA EFFECTIVELY: THE QUESTION OF UNIQUE IDENTIFIERS AND DATA PROTECTION

The value of a criminal justice population registry lies in the ability to link data from a wide variety of administrative sources. To be able to do this effectively, and to avoid duplication in the database, it is essential to create a single unique identifier which can link across these sources. In Ireland, no such linker exists at present. There is no identifier which can be used easily across the criminal justice system. The PPS number (PPSN) is an obvious first choice for any integrated scheme and its value is stressed by the National Statistics Board (NSB, 2009, p. 27).

The question of a unique identifier, and in particular, proposals to use the PPSN for this purpose, appears to be one of the greatest stumbling blocks to more movement on the linkage of data in Ireland. In the area of health, the need for a unique identifier is well recognised, but plans to use the PPSN appear to have given way to the proposed introduction of a separate unique identifier for health purposes (Department of Health and Children, 2008). However, the National Statistics Board considers that there must be a way to link the PPSN to this number for analytical purposes (NSB, 2009, p. 28). In

addition to the data protection laws, under the Social Welfare (Consolidation) Act 2005 it is an offence to utilise a PPSN outside of a narrow set of criteria and only “specified bodies” are allowed to seek it. Criminal justice agencies are not allowed to request it.<sup>1</sup>

There is a legitimate question as to whether it is permissible for criminal justice agencies to collect a person’s PPSN to enable the CSO to link their criminal justice outcomes with other data. Such individuals may, understandably, be concerned that the PPSN could be used against them and have negative consequences regarding social welfare or the care of children or their health status, with many already likely to be suspicious of authority. This problem is not insurmountable.

At present, the Garda PULSE system gives a number for each incident and also has a number for individuals. Subject to the difficult task of ensuring precision in a system reliant on accurate provision and recording of personal information, this number could be used to link across the various criminal justice and other agencies. The number could then be linked to the PPSN by a centralised body outside the Department of Justice and Equality or any criminal justice agency. Crucially, there should be no ability for the data collector (the Gardaí or the Irish Prison Service) to link directly to the PPSN or indeed to any of the other administrative records, with the CSO, or other central repository, acting as the body which “deidentifies” any such information. It is again essential that the PPSN is used simply to link data from various sources and for no other purpose and that this is enshrined in legislation.

There is a further barrier to the gathering and comparison of data in the absence of a post code system throughout Ireland. Administrative records contain details of a person’s address, such as in the Prisoner Records Information System, but mapping those addresses onto the “electoral divisions” used in the Census and in measurements of poverty is not automatic and requires a further effort on the part of the researcher. Having a post code to record would give us a far more nuanced and localised understanding of the backgrounds of prisoners and where different types of offending is concentrated. The National Statistics Board notes “... the absence of a good post code system throughout the country hampers our ability to use statistics to understand what is happening at the level of localities” (NSB, 2003b, p. 21) and its presence would enable the linkage of different data sets.

An individual identifier would give us important information about the background, social and health circumstances of individuals in conflict in the law. It would not, however, allow for information to be gathered on the geographical distribution of crime to gain an insight into the socio-economic

<sup>1</sup> The Garda Síochána may request it but only in respect of its own members.

and other profile of the areas most affected by crime. It is, therefore, similarly essential that the data collected by criminal justice agencies regarding the location of offences be geo-coded. This would allow more effective policing and social policy strategies to be targeted on those areas with the highest levels of crime. It would be possible to do this by reference to Garda station, but a more refined and satisfactory mechanism would be to code at the level of address of the offence, where this can be obtained. Important information about the relationships between, for example, crime rates and indices of socio-economic deprivation, morbidity, educational achievement and others would be possible to obtain. The Garda Síochána Analysis Service is already engaged in “hotspotting” or examining the distribution of crimes spatially and temporally in particular areas. Being able to link that information to data on other indicators for those locations could facilitate multi-faceted and multi-agency approaches to local crime (for examples of the unit’s work, see Garda Síochána, 2011).

Using any data for the purposes of a population registry requires not only robust systems of protection and guidelines as to use, but also appropriate encryption, user authentication, regular auditing, splitting of the data transmitted by agencies into sets of personal information and “outcomes”, as well as controls on the disclosure of data and results. These protections are essential in order to provide an interlocking system to prevent harm coming to the individuals involved (Ford *et al.*, 2009; Lyons *et al.*, 2009).

It is possible that some combinations of data, even with safeguards such as removing a person’s date of birth and using an age range instead, may enable an individual to be identified from the information given to researchers. To ensure that such a scenario is avoided, the involvement of an ethics committee could be provided for in cases where identification may be possible due to the combination of variables accessed. The holder of the criminal justice population registry could refer any such projects to the committee, comprised of experts from relevant disciplines and with input from the Data Protection Commissioner who would decide whether to grant access and upon what terms.

### 5.1 *The European Dimension: Tensions Between Data Protection and Thirst for Statistics*

The requirements of European Union law are likely to place the greatest pressure on the Irish authorities to improve our collection of criminal justice statistics and curtail the tardiness evident to date. While there is a clear requirement on EU Member States to take appropriate steps to secure and prevent the misuse of personal information, there is a complementary movement within EU law and policy towards the collection and dissemination

of much more and better quality data in the areas of “freedom, security and justice”.

This was first made a priority under the Hague programme (EU, 2005) which gave “Eurostat”, the EU’s statistical agency, the mandate to develop comparable statistics in these areas. The Hague programme was itself prompted by the Millennium Strategy on organised crime and the Dublin declaration which recommended the development of precise, coordinated statistics on crime in the EU to assess the risks and trends in organised crime (EU, 2003). More recently, the Commission produced an “Action Plan” (Commission, 2006). This action plan seeks to develop statistics at EU level and to provide high-quality quantitative information by specifying the method to be applied for the gathering of those statistics. Proposals to establish an Observatory for the Prevention of Crime are likely to drive the desire for statistical information further. (European Council, 2010, paragraph 1.2.5).

Within the Endnotes to the Action Plan, the Commission also indicates that it is desirable for policy needs to have information from Member States on, *inter alia*, the average length of proceedings, the average length of a prison sentence handed down and served, by type of offence and the time spent in pre-trial detention by type of offence (European Council, 2006, p. 26, Endnote 36). Ireland does not at present make any of these publicly available, and it seems that such information may not even be gathered or at least calculated.

The intent of the European Union to expand its activities in statistical collection and to coordinate and in some cases direct the activities of Member States is made most clear in its 2009 Regulation on European Statistics (EC, 2009). This Regulation covers statistical data generally, and is not restricted to crime and justice, but it is likely to have far reaching effects. The objective of this Regulation is to ensure the coherence and compatibility of European statistics through cooperation and coordination between national statistical institutions and the Commission and creates a legal framework for the development, production and dissemination of European statistics.

A separate body, the Council of Europe’s “SPACE” series also contains some basic information on the prison numbers and imprisonment rates across its Member States as well as information on non-custodial sanctions (for the latest publication, SPACE II, see <http://www.coe.int/t/dghl/standardsetting/cdpc/Bureau%20documents/CE%20I%202009.pdf>).

As a result of all this activity and particularly increasingly onerous EU requirements, national statistical agencies are likely to come under greater pressure to provide not only more data in the area of criminal justice generally, but also data which will allow for the evaluation of EU wide policies. Though not specifically called for by EU legislation, the creation of criminal justice population registers would be an obvious way of getting the best quality

information to fulfil this growing appetite and to broaden the range of indicators by which policies may be evaluated.

## VI INTERNATIONAL EXPERIENCES OF POPULATION REGISTRIES

There are examples of criminal justice and other wide-scale population registries which could be used as models for any system Ireland might chose to create. Denmark holds a wide variety of information on population cohorts born in particular years, recording information not only on the health, social educational and criminal justice outcomes of those born, but also their mothers and fathers. This information is contained in several population-based registers which can be linked together by means of a unique identifier. Information, in particular a cohort study of men born in 1966, has been used to great effect by Christoffersen *et al.* (2003) to provide insights into, for example, why young men get involved in violent offending. Soothill *et al.* (2010) have also followed a 1980 birth cohort of 29,944 males to examine why some did not engage in criminal behaviour. As the authors comment, the very large sample sizes and the variety of indicators examined ensure Denmark is a particularly fruitful place for criminologists and crime policymakers to study. As they argue: "... with the availability of population registers and the possibility, under controlled conditions, of record linkage, Denmark provides a remarkable social laboratory for probing these issues" (p. 234). The example of Denmark is also instructive given that it is similarly bound by EU requirements on Data Protection. The Danish Data Protection Agency must approve all research projects involving the processing of personal data (<http://www.datatilsynet.dk/english/health-research-and-statistics-projects/private-research-and-statistics-projects/>). Section 5(2) of its Processing of Personal Data Act 2000 states that "... further (i.e. secondary) processing of data which takes place exclusively for historical, statistical or scientific purposes shall not be considered incompatible with the purposes for which the data were collected".

Although described by Australian scholars as "embryonic" by comparison with activities in health (Ferrante, 2009), criminal justice data linkage is at a far more advanced stage in Australia than Ireland. Western Australia made the first attempts in this area, establishing an Integrated Numerical Offender Identification System in 1993. This project routinely links police offender records with those from the courts, prisons and community sanctions. A unique offender identifier is used. De-identified data is then collected in a database which has been used for a number of studies, evaluations of interventions, and in the development of risk assessment measurements. The

process involves separation of the data provider from the person who links the data, who is then separated from the person who analyses it. The number of health studies based on data-linked records has grown from 87 between 1995 and 1999 to 308 by 2003-2007 (Trutwein, Holman and Rosman, 2006). The Commonwealth government subsequently created a data-linkage investment plan aimed at linking data across states and territories.

There have also been efforts to make “cross-sectoral” links between justice and non-justice data. Again in Western Australia, a study has been undertaken to link the records of those in prison with health records in order to investigate the morbidity and mortality of the prison population. A large project has also been undertaken to link the records of young people in conflict with the criminal law and health, education, child protection and disability data to examine developmental outcomes in children (Ferrante, 2009). There are obviously particular concerns in using data relating to children along with the question of parental consent. However, anonymised data which can be used with no distress or disturbance to anyone is unlikely to fall foul of our own Data Protection Acts, but protocols on the particular instance of children should be considered.

In New South Wales more recently, a study examined the mortality of heroin-using prisoners compared to the general population. A one-off study had been undertaken with 375 heroin-using prisoners in 1997. These records were linked to the Offender Integrated Management System (OIMS) which records all movements of people in the custody of the Corrective Services of New South Wales. These data were then linked to a dataset containing records on the use of methadone maintenance treatment and to “the Master Linkage Key” which included health records such as hospital data and cancer registration data. The study found that the participants had died at 6.1 times the rate of the New South Wales population (Larney and Burns, 2011).

Within England and Wales, there is no unique identifier used between the various criminal justice agencies. However, a pilot project, using names and dates of birth, has managed to link the records of 2.8 million people across the criminal justice system between 2008 and 2010 (Ministry of Justice, 2011). A “linking identifier” has been created for each person. England and Wales also has a National Offenders Index, which contains the criminal histories of all those convicted of an offence since 1963. This has been used to analyse the relationship between age, gender and crime.

In the public health domain, Wales has introduced the “SAIL” system to link information on demographic background and interaction with the Welsh health authorities. This has prompted research into, for example, the relationships between diet, entitlements to free school meals and results in state examinations (Ford *et al.*, 2009).

## VII SOME SUGGESTIONS FOR REFORM

Improved data collection and publication in the area of crime and criminal justice is necessary in order to improve both public understanding of crime and criminal justice and to improve the basis for policymaking. The increasing activity of the European Union in this area will also be a very practical driver of change. A number of specific and concrete recommendations about the Irish case can be made, which must first be addressed before any wider attempts at linkage between criminal justice datasets and other administrative holdings can be attempted.

First, the nature of reporting of data in the annual reports on prisons and places of detention requires improvement. In particular, the annual reports should state the average sentence length and number of prisoners committed and serving a sentence for every category of offence which is used by the Central Statistics Office in its publications on crime statistics and provide information which allows comparisons across the European Union. The types of offences for which those receiving fines go on to be imprisoned for non-payment should be published. Prison statistics should be published online at least every six months. At present, the rate of increase of the prison population has been such that the figures reported in the annual reports are significantly out of date upon publication. The pressures on the prison system would be more obvious if figures were published more frequently. Prison statistics should be released to a rigidly set timetable published well in advance by the Irish Prison Service (Statistics, 2004: recommendation 1.4).

The existing Prisoner Records Information System should be anonymised and made widely available to researchers obtaining the approval of the Prison Research Ethics Committee. In this regard it is also important that the capacity of criminal justice organisations in the area of statistics be increased. Our criminal justice organisations should use the same unique identifier for an individual who comes into contact with any of these organisations. A criminal justice unique identifier is necessary, along with the ability to link it to the PPSN.

To facilitate research, the resulting database should be made available as widely as possible to researchers. This might be achieved by publishing anonymised datasets online or with password protection authorised by the Central Statistics Office and subject to the approval of an Ethics and Information Governance Committee which involves the Data Protection Commissioner. The very large population health database created by Ford, Jones *et al.* (2009) in Wales employs an independent Information Governance Review Panel which includes representatives from the UK's National Research Ethics Service, the National Public Health Service for Wales, the

British Medical Association and the “Involving People” organisation. Comparable criminal justice stakeholders as well as judicial involvement may be appropriate for a criminal justice population registry to secure proper auditing and analysis of research proposals, but also to engender confidence amongst the research communities, data providers and individuals. In this regard, the example given by Ford *et al.* is again instructive. In its dataset, data access is location specific and available only via designated PCs in secure terminals, physically secured to their position and with no facilities to allow data to be transferred out of them. In addition, products of analysis are securely transferred and scrutinised by a senior data analyst and a professor of public health prior to release to researchers. Data users are subject to access agreements and the staff involved are also bound by access policies. The approach in Western Australia of ensuring that there are breaks in the ability to link from data collector to user is a valuable one.

While it is likely that most such research interest would come from criminological and social policy researchers, many legal academics, law students and lawyers are involved in sentencing research and are key users of any such research. However, traditionally, legal education in Ireland has provided law students with no social science research training of any kind. This must be remedied. The academic community generally must be active in calling for reform of our data sources in Ireland and in using what is available. Training of existing and future researchers in the use of any such dataset is essential to ensure that its full potential is mined.

It is also essential to provide for a proper statutory basis for the creation of criminal justice population registries and for their regulation. It is not enough to do as the Irish authorities have done in the case of the National Cancer Registry to have a blanket opt out of data protection legislation without other legislative safeguards for data. It is necessary to legislate to give statutory effect to confidentiality and protection policies of national statistical agencies and data collectors.

There should be international sharing of best practice on how to collect good quality data while ensuring the privacy of individuals. National authorities should also ensure the publication of practical guidelines for data collectors, researchers and the public on the appropriate use of data (on suggestions in the area of public health see (Verschuuren *et al.*, 2008)).

While it is not an easy task to create criminal justice population registries, there is an urgent need for Ireland to develop adequate statistics on crime and punishment. Not only will there be increasing pressure from the European Union for such information, the Irish experience in the formation of prison policy to date shows the critical importance of basing our plans to spend large amounts of money and deprive people of their liberty on a proper evidentiary

footing and to ensure this happens only when demonstrably necessary. It also facilitates states to analyse an important facet of its population's "wellbeing", that of freedom from crime and also freedom from involvement in crime and the criminal justice system.

It would be naïve to think that better data and more robust evidence would of themselves translate into better criminal justice policy. Governments will always make decisions for political reasons, for convenience and sometimes out of ideological commitments. However, to act both as a method of evaluating government actions and to attempt to steer it to a better approach, the tardy and hesitant approach of criminal justice agencies and governments in facilitating the development of criminal justice population registries should be tolerated no longer.

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