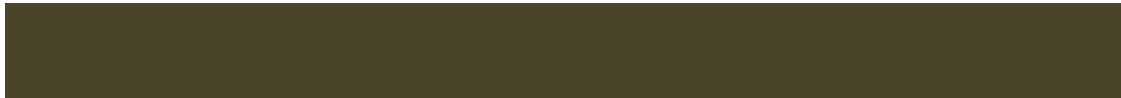




PUBLIC PROSECUTION SERVICE FOR NORTHERN IRELAND

Administrative Data Quality Document



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1. Introduction

'Administrative data' refers to information collected primarily for administrative purposes, rather than for research or statistical use. The advantages of administrative data include the size of the dataset available, time periods recorded, affordability and efficiency. This compares favourably against alternative methods such as surveys and bespoke data gathering projects which can be costly and time consuming.

There are of course limitations to using administrative data and these have been highlighted by the UK Statistics Authority. However the Statistics Authority also recognises that the use of such data is central to the production of Official Statistics.

A statement on the use of administrative data, entitled 'Quality Assurance of Administrative Data – Setting the Standard', was published by the Statistics Authority in January 2015. This was accompanied by the 'Administrative Data Quality Assurance Toolkit'. This guidance sets out the following advice in respect of the quality assurance of administrative data:

"Quality assurance of administrative data is more than simply checking that the figures add up. It is an ongoing, iterative process to assess the data's fitness to serve their purpose. It covers the entire statistical production process and involves monitoring data quality over time and reporting on variations in that quality. Post-collection quality assurance methods, such as data validation, are an important part of the quality assurance process, but can be of limited value if the underlying data are of poor quality. The Authority encourages the application of critical judgment of the underlying data from administrative systems before the data are extracted for supply into the statistical production process. As with survey data, producers need to: investigate the administrative data to identify errors, uncertainty and potential bias in the data; make efforts to understand why these errors occur and to manage or, if possible, eliminate them; and communicate to users how these could affect the statistics and their use."

Following the publication of the Statistics Authority's guidance, the Public Prosecution Service (PPS) has reviewed the administrative data sources used in the production of its Official Statistics. The results of this review are presented within this document.

As the assessment of data quality is an ongoing process, this document will continue to be updated to reflect any changes or additional systems used.

2. Background

The PPS's Statistics and Research Branch currently produces three Official Statistics publications that solely use administrative data. These are:

a) Statistical Bulletin

This bulletin presents key statistics on the activity of the PPS, including caseloads and prosecutorial decisions. It also includes data on the outcomes of prosecutions at court. The report is published on a quarterly basis and includes comparisons for the equivalent period of the previous year.

b) Cases Involving Hate Crime

This bulletin is set out in two parts; cases involving hate crime submitted by the Police Service of Northern Ireland and cases considered by a prosecutor to have involved hate crime which was 'aggravated by hostility'. The statistical information provided in this bulletin includes caseloads, prosecutorial decisions and outcomes at court.

c) Cases Involving Sexual Offences

This bulletin presents key statistics in relation to the prosecution of sexual offences, including caseloads and prosecutorial decisions. It also includes data on the outcomes of prosecutions at court involving these offences.

The data on which these bulletins are based are also used to provide information internally to senior management and externally, for example in response to Freedom of Information requests.

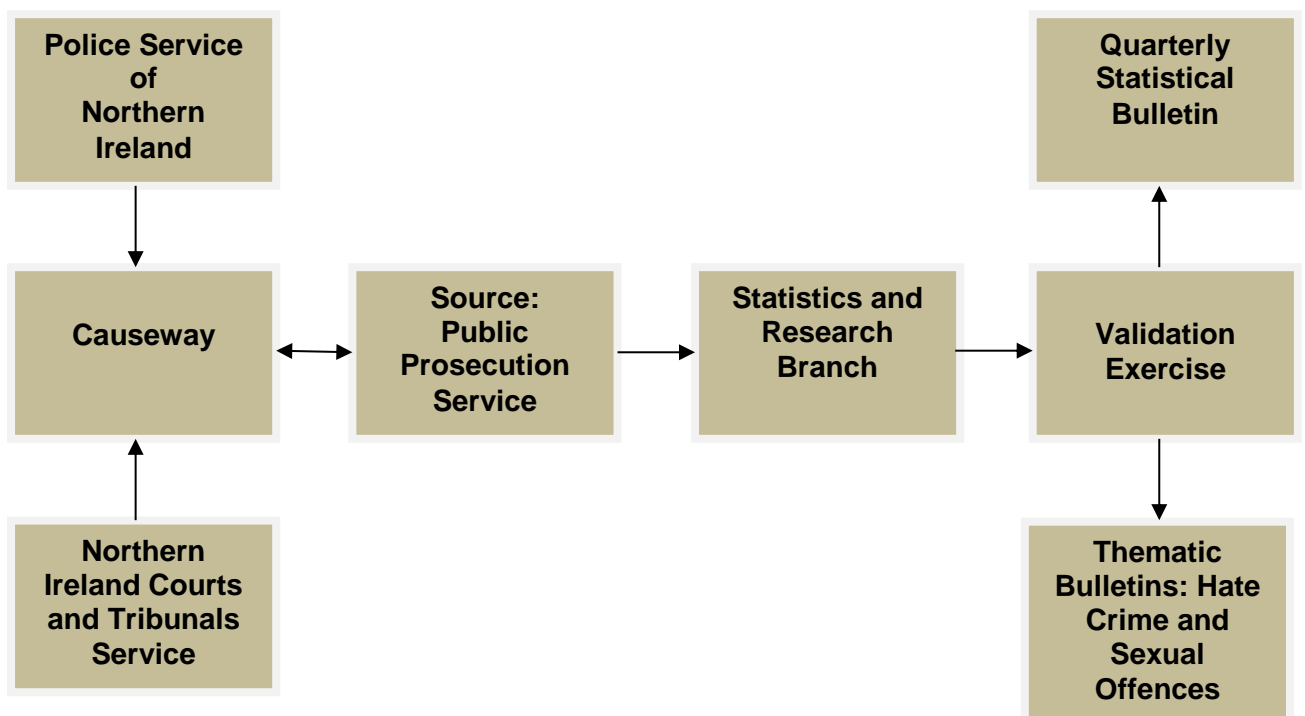
The bulletins published by the PPS will be of interest to the general public, policy makers, academics and those with an interest in the criminal justice system in Northern Ireland.

3. Data Quality

Using guidance from the UK Statistics Authority, the following section provides an overview of the administrative data sources used in the production of the PPS's Official Statistics publications.

Figure 1 details how information is shared through the relevant criminal justice organisations, via the Causeway system, and how this is extracted by the PPS's Statistics and Research Branch.

Figure 1: Data Source



3.1 Source: PPS Case Management System (CMS)

Information presented in the Quarterly Statistical Bulletin, Hate Crime and Sexual Offences Bulletins is derived from the PPS Case Management System (CMS), the main operational system in use within the PPS. This is a 'live' system with data being input / updated by operational staff on a daily basis. CMS is linked to the Causeway Data Sharing Mechanism (DSM1) which is an interconnected information system as part of the Criminal Justice System Northern Ireland. As well as the PPS, information is shared by the Police Service of Northern Ireland (PSNI) and Northern Ireland Courts and Tribunals Service (NICTS). Through the sharing of information via Causeway, Statistics and Research Branch is able to draw administrative data from PSNI and NICTS through CMS.

3.1.1 Operational context and administrative data collection

CMS is an administrative data system that links with other criminal justice organisations (PSNI and NICTS). Information is input by PPS staff and this is shared via Causeway. Similarly information from PSNI and NICTS is also shared via Causeway which in turn updates CMS. Statistics and Research Branch is then able to interrogate CMS using the Business Objects reporting tool.

The information input by the PPS and the other criminal justice organisations needs to be highly accurate as it is used to manage daily business and to share important information between organisations.

As with any administrative data system, there is a risk of human data entry error. The PPS has numerous built-in validations to ensure that the information being input follows a logical order and that alerts are raised to any issues that may arise. As the information is factual there is little scope for subjectivity.

3.1.2 Communication with data supply partners

Statistics and Research Branch has close working relationships within the PPS at all levels, from ICT staff to policy colleagues. These relationships allow the statisticians within the branch to voice opinions or concerns that may become apparent regarding the information on CMS. They also allow for the discussion of any upcoming changes that may be made to the information that is collected and their implications for PPS statistics.

Data sharing agreements are in place with the other criminal justice organisations due to the sharing of information through Causeway. These ensure that information can be easily shared, allowing for both day to day management of the business and for wider use in the production of statistics.

Good working relationships are also in place with colleagues in the wider criminal justice system. Any changes that are to be made within any of the organisations in relation to administrative data are relayed and discussed with an impact assessment carried out where required.

Engagement is also sought with our external users who have an interest in the information published by PPS. This helps to ensure that the information is fit for purpose. Details of who to contact within PPS, and how to do so, are included in all publications so that anyone can contact Statistics and Research Branch to provide feedback or suggestions.

3.1.3 QA principles, standards and checks by data suppliers

The PPS is an integral part of the criminal justice system. A case is received from PSNI and it is up to the PPS to decide what action should be taken. This could involve the case being prosecuted and tried at court, dealt with via a diversionary disposal or no further

action being taken. It is therefore very important that this information is accurate. There are a number of built-in validations in the system to ensure that any information input is accurate and in the correct format.

Any changes made to the PPS system is discussed both internally and externally with criminal justice partners. All changes have to be agreed and tested before it comes into effect. The same procedure is carried out by PSNI and NICTS when changes are proposed as their information feeds into CMS.

3.1.4 Producers' QA investigations & documentation

A number of quality assurance / validation checks are carried out on CMS to ensure the data are reliable and robust for use. These include:

- Checks carried out on a monthly basis to ensure specialist cases have been marked as such and are recorded under the correct region/section. Any cases found to be in the incorrect region/section are updated on the system.
- Checks are also carried out on both court disposal dates and court outcomes on a quarterly basis. This involves manually checking results as shared by NICTS with PPS.
- Checks carried out on an annual basis in preparation for the publication of Cases Involving Hate Crime bulletin. These include checking cases opening at court as aggravated by hostility or receiving an enhanced sentence due to an offence being aggravated by hostility but which were not originally flagged by the PPS prosecutor as such.

Due to the CMS being a 'live' system, when preparing statistics for publication a 'snapshot' is taken at a point in time to use for reporting, ensuring that information can be maintained as reported.

All publications contain information relating to data sources and any issues or guidance that may be required relating to data quality and the interpretation of the information. Furthermore, Statistics and Research Branch works closely with policy colleagues to ensure there is an appropriate level of understanding with regard to the information in question.

3.1.5 Administrative Data QA Toolkit: Risk Matrices

Table 1: Quality Assurance Matrix

Practice Area	Level of Assurance
Operational context & admin data collection	A2: Enhanced Assurance
Communication with data supply partners	A2: Enhanced Assurance
QA principles, standards and checks by data suppliers	A2: Enhanced Assurance
Producers' QA investigations & documentation	A2: Enhanced Assurance

The score of **A2: Enhanced Assurance** has been selected due to the fact that that data are an important source of information, used in a number of publications.

Table 2: Risk/Profile Matrix

Level of risk of quality concerns	Public interest profile		
	Lower	Medium	Higher
Low	Statistics of lower quality concern and lower public interest [A1]	Statistics of low quality concern and medium public interest [A1/A2]	Statistics of low quality concern and higher public interest [A1/A2]
Medium	Statistics of medium quality concern and lower public interest [A1/A2]	Statistics of medium quality concern and medium public interest [A2]	Statistics of medium quality concern and higher public interest [A2/A3]
High	Statistics of higher quality concern and lower public interest [A1/A2/A3]	Statistics of higher quality concern and medium public interest [A3]	Statistics of higher quality concern and higher public interest

The Public Interest profile has been set to **medium** due to the interest shown from the media and through ad hoc queries received from the general public.

Data taken from the PPS Case Management System has also been assessed to be **medium** risk in terms of quality concerns. Effective communication arrangements are in place both internally and with other organisations that feed into CMS, supported by the application of extensive quality procedures.

Overall this indicates a Risk/Profile Matrix score of **A2**, as shown in Table 2 above.

**Statistics and Research Branch
Policy and Information Unit
Public Prosecution Service
for Northern Ireland
Belfast Chambers
93 Chichester Street
Belfast BT1 3JR**

www.ppsni.gov.uk

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