

An Garda Síochána

Review of the Quality of PULSE Crime Data for Q3 2023

Quality assurance of the recording¹ of crime data in An Garda Síochána is built around three main pillars:

- Primary collection of incident data is carried out by Incident Creation Representatives at the Garda Information Services Centre (GISC). Automated collection also takes place in certain instances from CAD and FCPS, and subsequent updates are carried out by GISC.
- GISC Reviewers assess the quality of created incidents, highlighting issues requiring clarification or updates required by placing the incident on 'Reviewed Clarification' on PULSE. This requires the Garda member to contact GISC to resolve the issue before the incident is marked reviewed.
- The Performance Accountability Framework (PAF) includes PULSE crime incidents forming the basis for regular (at least weekly) operational performance reviews by local Garda management. Data quality issues are flagged back to GISC for review and amendment where appropriate.

The creation-review-PAF data cycle represents a 'closed loop' process where incident data reported by Garda members goes through multiple checks including being presented back to local management for performance monitoring and operational decisions. The primary purpose of the recording of data on PULSE is to support the prevention, investigation and detection of crime. The Central Statistics Office (CSO) produce and disseminate official statistics on recorded crimes, which are based on data recorded on PULSE by An Garda Síochána. In October 2024, An Garda Síochána commenced a review of PULSE data quality with respect to incidents reported in Q3 of 2023. This review was carried out by GISC with the support of the Garda Síochána Analysis Service (GSAS), and it examines key aspects of data quality, including:

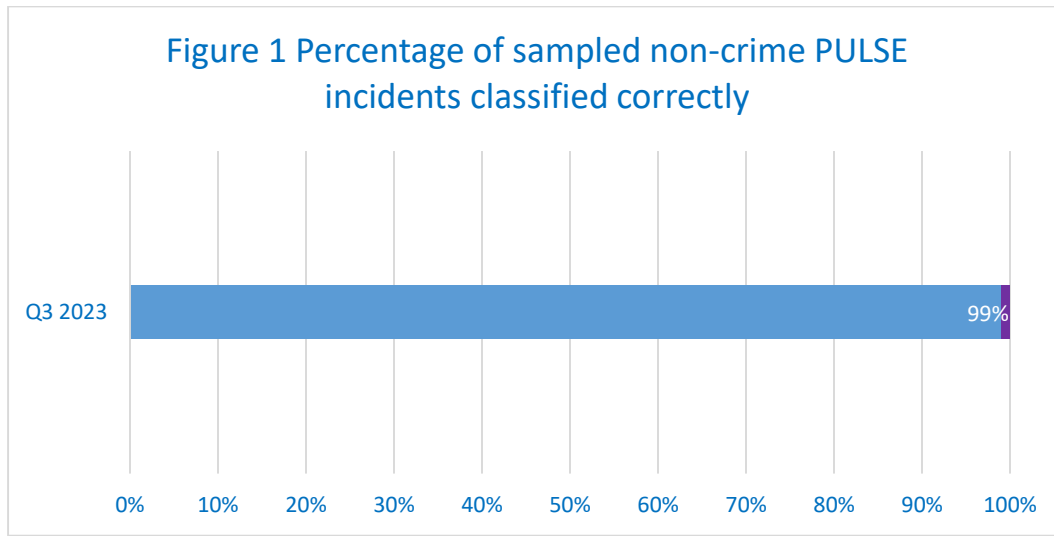
- Classification of crimes in 'non-crime' incident categories
- Crimes marked 'invalid' on PULSE
- Adherence to crime counting rules
- Misclassification of incident type
- Timely recording of PULSE crime incident records
- Detections
- Recorded crime victims

This has now become a biannual review looking back at the previous year. Ongoing data quality reviews such as this, data quality metrics (An Garda Síochána Crime Incident Data Quality Metrics [Statistics - Garda](#)) together with our PULSE data quality framework are intended to inform users of crime statistics about the quality of the underlying PULSE data.

¹ Information on how a crime is recorded is available in the 'Guide to How Crime is Recorded and Counted by An Garda Síochána', which is available at the following link: [Crime Reporting Document \(garda.ie\)](#)

Classification of crimes in 'non-crime' incident categories

GISC sampled 200 non-crime PULSE incident records of three types reported in Q3 2023: 'Attention and Complaints', 'Property Lost' and 'Domestic Dispute – No Offence Identified', and examined the Narrative and related data fields to assess whether the classification of the incident as a non-crime had been accounted for, either in the incident's description or by explicit statement that no offence had taken place. Of the 200 incidents reviewed, 198 (99%) were deemed to have been classified correctly.

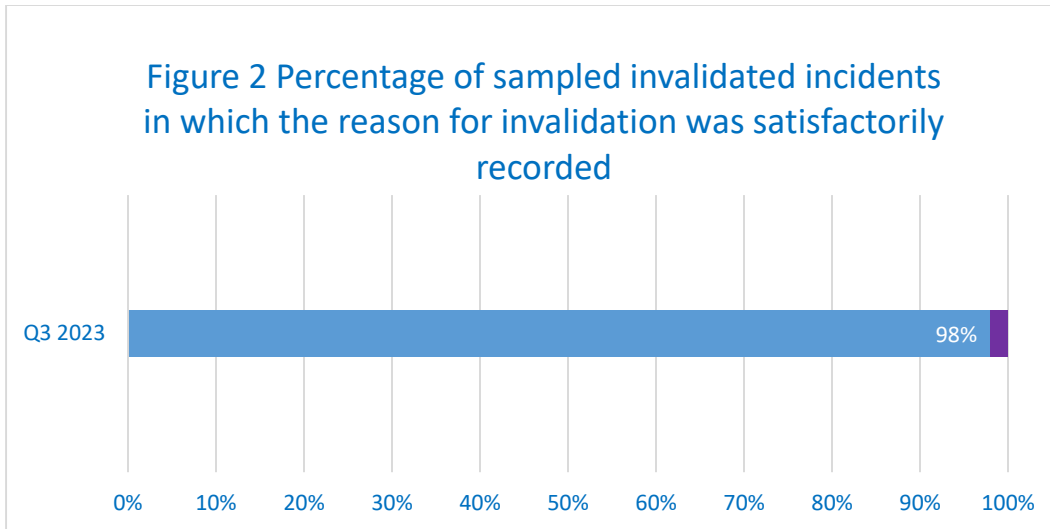


Crimes marked 'invalid' on PULSE

GISC sampled 100 invalidated PULSE crime incidents reported in Q3 2023 and checked the text of the Narrative and related data fields to assess whether the reason for invalidation had been recorded.

PULSE Release 7.7, deployed on 11/07/2021, introduced a requirement for PULSE users to record an invalidation reason by selecting one from a dropdown list. While this software update has enhanced data governance with respect to the invalidation of incidents, it is still necessary for PULSE users to include sufficient supporting details on the reason for the invalidation in the Narrative and related fields.

Of the 100 incidents reviewed by GISC, the reason for invalidation was satisfactorily recorded in 98 incidents (98%).



Adherence to crime counting rules²

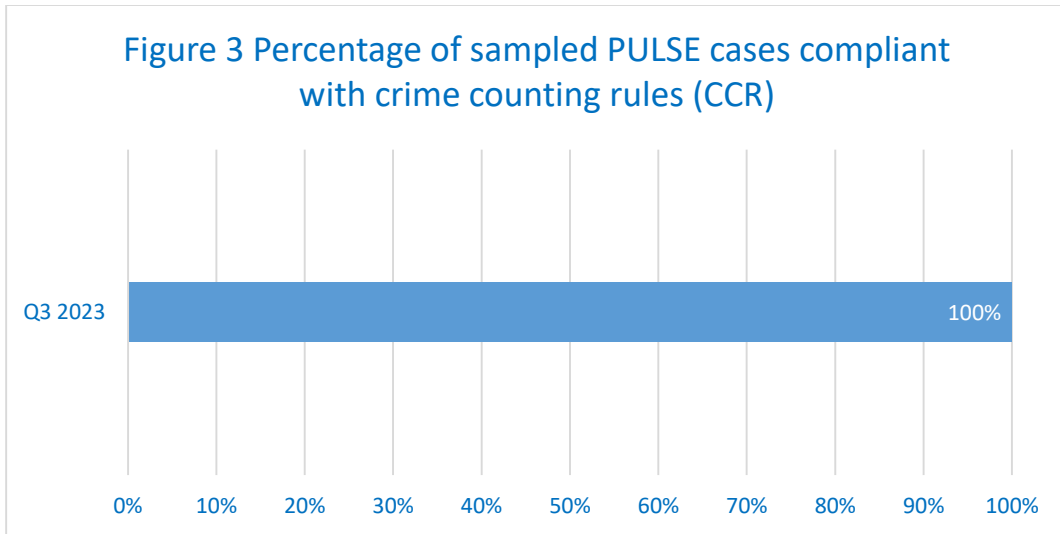
In 2018, GISC implemented a limited data quality check on sexual offences and fraud incidents to ensure the correct application of the crime counting rules.

In the autumn of 2022, an enhanced data quality process was put in place by GISC extending checks on the application of the crime counting rules to all crime categories. All cases created on PULSE from 1st July 2022 to 30th September 2024 have been reviewed to ensure the correct application of the crime counting rules. GISC will review all cases created since July 2022 on a quarterly basis to ensure correct application of the crime counting rules.

GISC sampled 100 non-primary incidents on PULSE reported in Q3 2023, along with all associated primary or non-primary incidents, and examined each set (each PULSE case) of incidents together to consider compliance with the crime counting rules.

Of the 100 incidents that were checked, all 100 PULSE cases (100%) were found to comply with the crime counting rules.

² There are specific rules governing the recording and counting of crime incidents which are set out in the ‘Guide to How Crime is Recorded and Counted by An Garda Síochána’, which is available at the following link: [Crime Reporting Document \(garda.ie\)](https://garda.ie/~/media/Files/2022/07/20220720-Guide-to-How-Crime-is-Recorded-and-Counted-by-An-Garda-Siochana.pdf)



Misclassification of incident type

GISC sampled 50 PULSE incidents reported in Q3 2023 in each of six crime incident types (total sample size of 300 incidents): ‘Theft (Other)’, ‘Sexual Assault’, ‘Public Order Offences’, ‘Possession of Offensive Weapon’, ‘Criminal Damage (Not by Fire)’, and ‘Assault Minor’. GISC considered the information contained in descriptive data fields to assess whether the incident classification was appropriate based on the information reviewed.

Of the 300 incidents checked, 295 incidents (98.3%) contained information in the descriptive data fields to confirm the classification was appropriate. The figures on sampled crime incidents found to be classified correctly broken down by incident type were as follows: 49 (98%) ‘Theft (Other)’ incidents, 49 (98%) ‘Sexual Assault’ incidents, 48 (96%) ‘Public Order Offences’ incidents, 49 (98%) ‘Possession of Offensive Weapon’ incidents, 50 (100%) ‘Criminal Damage (Not by Fire)’ incidents, and 50 (100%) ‘Assault Minor’ incidents.

Figure 4 Percentage of sampled crime incidents classified correctly

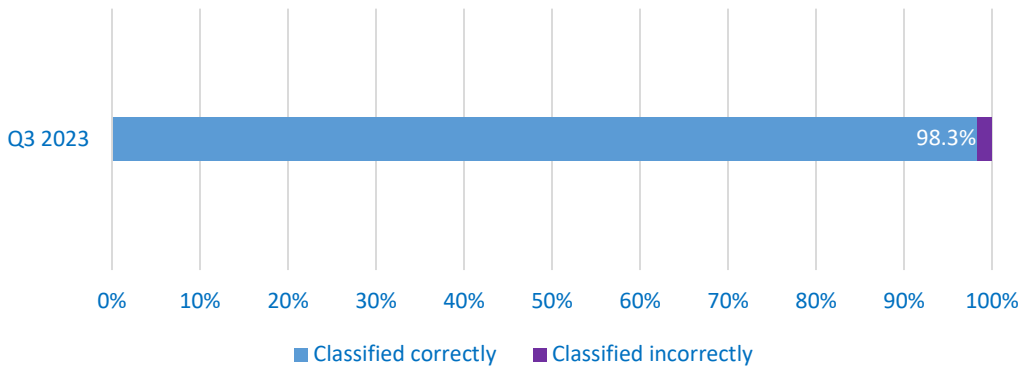
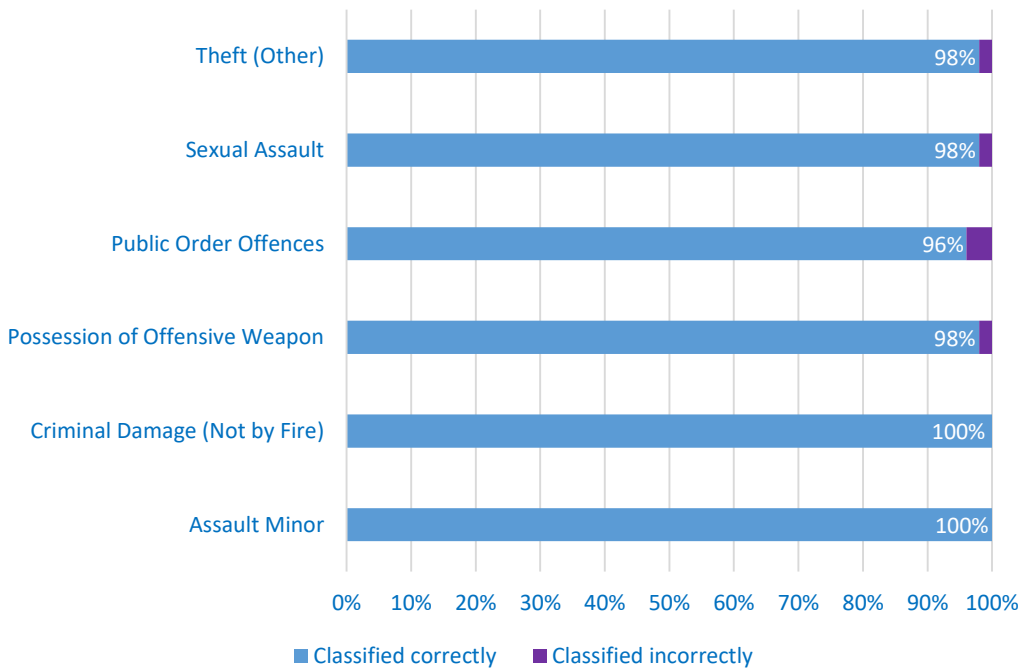
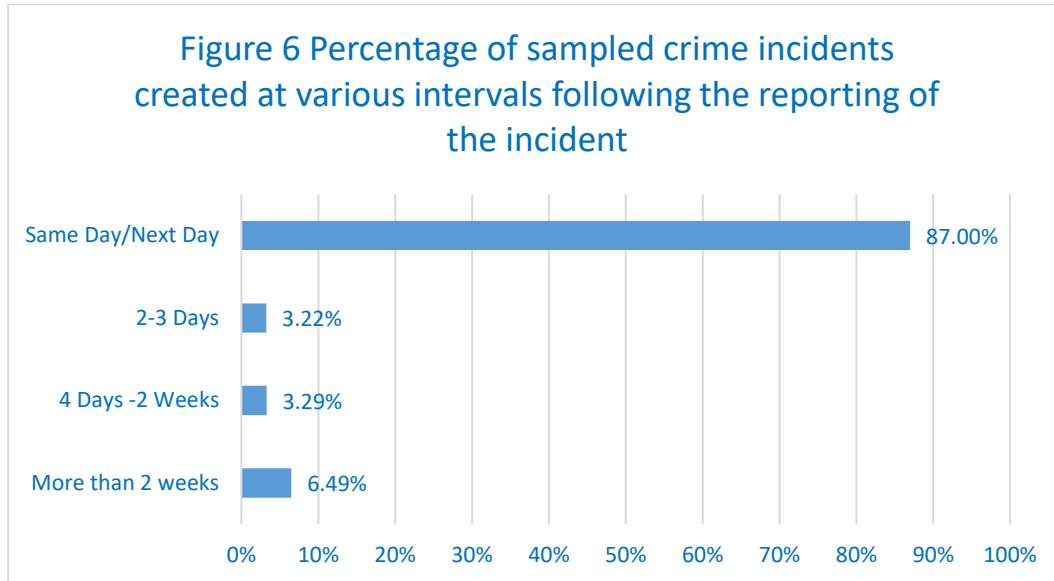


Figure 5 Percentage of sampled crime incidents classified correctly



Timely recording of PULSE crime incident records

GSAS reviewed PULSE crime incidents reported in Q3 2023 from a range of ICCS groups³. It was found that 87% of incidents were recorded on PULSE on the day on which they were reported or on the following day.



GISC is aware that there is a backlog in processing a large number of Section 19 information referrals, a secondary data source on potential fraud incidents from financial institutions. This is likely to impact on recording timeliness as the secondary data is reviewed if it identifies fraud incidents which need to be recorded. The recording timeliness of fraud incidents reported directly to An Garda Síochána by victims is not impacted.

A detailed note on the delay in processing these Section 19 information referrals is included in Appendix I for the information of users of AGS Crime Data.

³ Incidents extracted from the following ICCS groups: 01-Homicide Offences, 02-Sexual Offences, 03- Attempts/Threats to Murder, Assaults, Harassments and Related Offences, 04-Dangerous or Negligent Acts, 05- Kidnapping and Related Offences, 06-Robbery, Extortion and Hijacking Offences, 07-Burglary and Related Offences, 08-Theft and Related Offences, 09-Fraud, Deception and Related Offences, 10-Controlled Drug Offences, 11- Weapons and Explosives Offences, 12-Damage to Property and the Environment, 13-Public Order and other Social Code Offences, and 15-Offences against Government, Justice Procedures and Organisation of Crime. Please note that the crime counting rules were applied in this analysis. Note also that incidents arising from fixed charge penalty notices and invalidated incidents were excluded.

Detections

GSAS reviewed PULSE data relating to incidents reported in Q3 2023 with sanctions (including charges and summons). Various data fields within the incidents were reviewed against suspected offender data for coherence. It was found that:

- In almost 100% of cases, a valid charge or summons corresponded with an incident having been marked as 'Detected' or 'Resulted in Proceedings'.
- In 99% of cases, the year of the first valid charge or summons associated with a PULSE crime incident corresponded with the detection date year.
- In more than 99% of cases, a valid charge or summons corresponded with the presence of a valid suspected offender record.
- In 99% of cases, a valid charge or summons corresponded with the detection status of a valid suspected offender record indicating that proceedings had commenced.

Recorded crime victims

GSAS reviewed PULSE data relating to a number of incident types⁴ reported in Q3 2023 and examined the extent to which an 'injured party' had been recorded in the incidents. GSAS found that an injured party was associated with 100% of homicide offences, 99% of physical and sexual assault offences, 99% of Robbery from the Person incidents, and 99% of Theft from Person incidents. Related sex and date of birth data fields were also checked; the findings are set out in Figures 8 and 9 on page 8 of this report.

⁴ As part of the review, a subset of incident types were extracted from requested crime groupings, including Homicide offences (Murder, Manslaughter and Dangerous Driving causing Death incidents), Physical Assault offences (Assault Minor and Assault Causing Harm incidents), Sexual Assault offences (Sexual Assault, Rape of a Female, Rape Section 4, Sexual Offence involving Mentally Impaired Person, Buggery and Aggravated Sexual Assault incidents), Robbery from the Person incidents and Theft from Person incidents. Incidents in which the IP is an organisation (rather than an individual) or a member of An Garda Síochána are excluded from this analysis.

Figure 7 Percentage of sampled crime incidents in which an injured party was associated

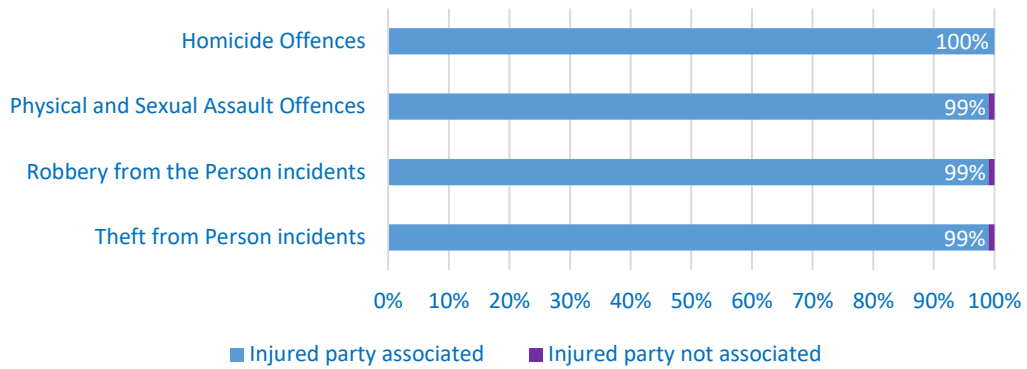
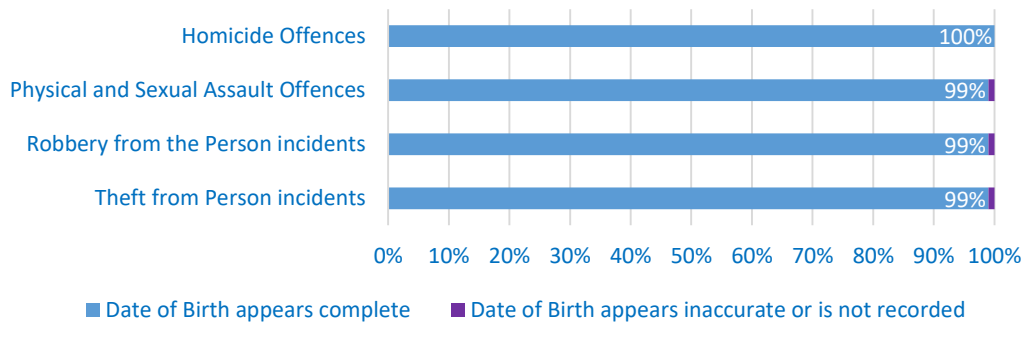
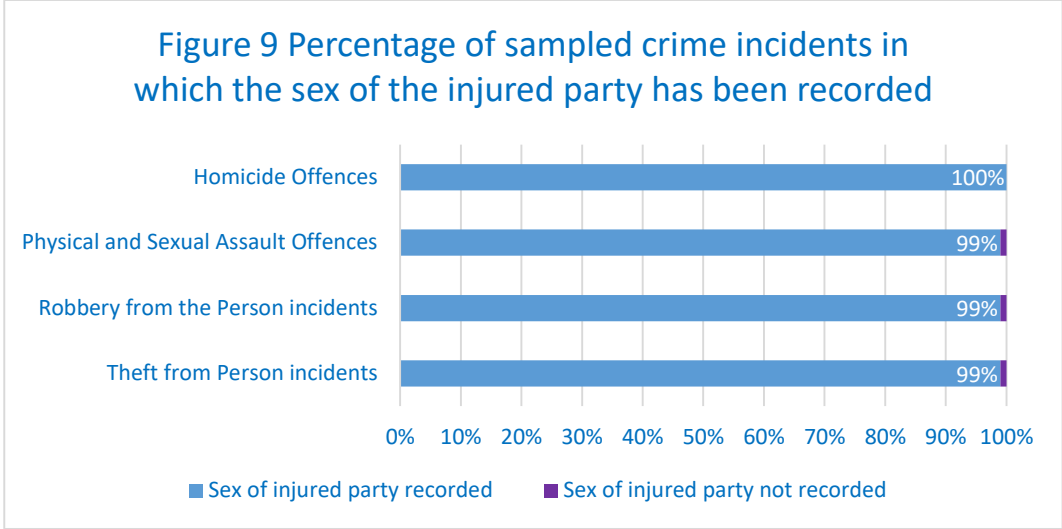


Figure 8 Percentage of sampled crime incidents in which the Date of Birth of the injured party appears complete





An Garda Síochána is committed to cultivating an information-led service, using data and technology to drive efficiencies, effectiveness and decision making. The purpose of this review is to share additional information in relation to the quality of our data, inform users of crime statistics about the quality of the underlying PULSE data alongside demonstrating the effectiveness of our Data Quality Framework.

Appendix I- Delays in processing Section 19 Referrals from Financial Institutions.

Section 19 of the Criminal Justice Act 2011 outlines that a person shall be guilty of an offence if he or she has information which he or she knows or believes might be of material assistance in—

(a) preventing the commission by any other person of a relevant offence, or

(b) securing the apprehension, prosecution or conviction of any other person for a relevant offence,

and fails without reasonable excuse to disclose that information as soon as it is practicable to do so to a member of the Garda Síochána.

A person guilty of an offence under this section shall be liable—

(a) on summary conviction, to a class A fine or imprisonment for a term not exceeding 12 months or both, or

(b) on conviction on indictment, to a fine or imprisonment for a term not exceeding 5 years or both.

These referrals are distinctly different to fraud incidents where the victim reports directly to AGS. Where a victim reports directly to AGS, it is recorded in line with normal policy and procedures. As outlined above 87% of incidents were recorded on PULSE on the day on which they were reported or on the following day. Once recorded, individual incidents are investigated and also reviewed to identify patterns of larger scale organised crime. This is supported by the development of new technology and analysis methodologies.

However, it is apparent that the level of fraud crime directly reported by victims is lower than its prevalence in society. For example, a victim may decide not to report a fraud related theft to An Garda Síochána if their money is returned by the financial institution.

The Garda National Economic Crime Bureau (GENCB) has been working with financial institutions within Ireland to improve the consistency of reporting of potential fraud occurrences based on the obligations in the legislation.

Since August 2023, a centralised unit within the GNECB handles referrals from financial institutions. This unit reviews all referrals. The incident is recorded on PULSE if the following criteria are met:

- The referral is believed to be a potential crime
- It does not relate to an incident which has already been reported by the victim directly to AGS

These referrals are an important secondary data source. They contain detailed information in a variety of formats. Gardaí need to evaluate this information to understand the true extent and prevalence of certain types of fraud occurring within Ireland. The referral reports are complex and are currently individually reviewed within GNECB to identify if a crime has occurred and to identify if the victim has already reported to AGS. The incident is then referred to a local Garda Division to investigate. This follows the same process as for directly reported and recorded fraud crimes outlined above.

As a result of the large volume and complexity of these referral reports, there is a backlog in reviewing them. This is resulting in delays identifying the associated new crime incidents and recording them on PULSE. This in turn is likely to lead to a significant increase in volume for crime statistics under (only) the Fraud ICCS 09 (Fraud, Deception and Related Offences) category as the backlog is cleared. AGS is evaluating new methodologies to improve the efficiency and consistency of initial reporting as well as advanced decision support technology that will speed up the processing of these high volume reports. However, processing large volumes of mixed format reports will continue to be a complex process. It is expected to take a number of months to optimise the processing of the backlog as well as new reports and, where appropriate, to record and quantify any identified crime incidents.