## Review of process for ensuring data quality on Garda PULSE system

#### 26 September 2023

### **Context**

This review was carried out by an Independent Consultant and commissioned as part of an overall effort by AGS to identify improvement opportunities within the Performance Accountability Framework and the quality assurance processes implemented by AGS and support the development of a roadmap ensuring that data is fit to enable policing activities into the future.

The specific objective was to articulate the risks to data quality at each stage of the end-to-end process for the identification, creation, and processing of crime records on the PULSE system, and the existing of potential controls that could be put in place to mitigate these risks.

For the avoidance of doubt, the scope of this review did not cover:

- · Review or uplift of current Data Quality Management guidance documents;
- Detailed mapping of process or any sub-processes;
- Detailed documentation or testing or assurance over the design or operating effectiveness of existing controls; or,
- Any implementation planning or delivery of improvement opportunities identified.

# **Risk and Control Assessment**

Risk Details	Control Details	Control Status	<u>Commentary</u>
Incidents reported through 'Computer Aided Dispatch' are not transferred or recorded accurately, appropriately, or timely on Pulse.	When a CAD incident is first closed (saved), an API between CAD and PULSE automatically triggers the creation of a shell PULSE file.	In place	The automated control being brought in as part of GARDASafe significantly reduces the risk of disconnect between CAD and PULSE.
	If there are any temporary communications issues between CAD and PULSE, incidents are queued for PULSE and trigger creation of shell PULSE files once communications issues resolved.		
	Automated controls ensure CAD incidents cannot be marked as complete unless a valid PULSE ID is inserted into the CAD record (for GARDASafe/CAD 2.0)		
	Daily, automated controls within PULSE and CAD ensure that Daily PAF Incident Reports include 1) any CAD calls already updated in PULSE 2) any CAD Incidents not yet updated on PULSE 3) Any CAD calls closed without skeleton PULSE record (i.e., duplicate calls).	In place	The use of the statistics coming out of these controls will be very helpful as a management tool at divisional/district level and for insights at national level.
	Further controls create alerts in CAD for incidents not updated within 3 days and include additional section in Weekly PAF reports for incidents not updated in PULSE within 24 hours.		
	Evidence of controls is retained in PULSE and PAF records.		

Incidents not reported through 'Computer Aided Dispatch' are not recorded accurately, appropriately, or timely on Pulse.	Control gap re completeness - however implementation of GARDASafe programme has significantly reduced the circumstances in which this risk could occur.	In place but opportunities to improve	If members fail to initiate records of incidents not captured through CAD, there is little that GISC can do to identify data gaps. Hence, it is worthwhile trying to minimise situations where incidents are not being initiated on CAD. GARDASafe is aligned to this approach.  We also understand from GISC that there are operational procedures and controls at local level that prompt Members to initiate PULSE records as appropriate.
	On a daily basis, Incident reports initiated on Pulse by AGS members (other than GISC) in the previous 24 hours are reviewed and updated by GISC members to ensure that they have been documented in line with relevant procedures.  Note in some instances this is facilitated by the AGS member ringing GISC and the GISC team member documenting the incident on Pulse in accordance with information provided by the AGS member.  Any issues noted are either corrected, or, if required, returned to AGS member for clarification ('Review Clarification' status).  Evidence of this review is retained on the Pulse audit trail.	In place	

Incident reports on Pulse are not complete, accurate or recorded in line with International Classification of Crime for Statistical Purposes (ICCS), Central Statistics Office requirements and AGS processes.	Automated controls within Pulse require a minimum amount of data to be captured as part of each record. This includes several 'contingent' controls such as, if the incident involves a vehicle, an automated control to capture the vehicle registration number.	In place but opportunities to improve	This control is very powerful. Consider 1) ensuring that all GISC personnel are aware of the nature and extent of these automated controls; 2) consider if data quality reviews can identify more opportunities to increase the extent of these controls based upon feedback arising from reviews; and, 3) consider if PowerBI dashboarding or similar could be used to help identify and remediate outliers.
	For each Incident Report edited by a member of GISC, a GISC DQ Review Officer reviews the documentation on Pulse to ensure it is complete and documented in line with relevant procedures.  Any errors are corrected or returned to member who initially edited the record for remediation.  A risk-based approach is taken to prioritise which reports are reviewed in this manner and how rapidly post the initial data input they are reviewed.  Evidence of this review (and update where relevant) is retained in the Pulse audit trail.	In place but opportunities to improve	There are two improvement opportunities with this control:  1) In most cases, the reviewer edits the record without further oversight - this reduces the efficacy of the 'maker/checker' process and does not drive feedback to initial documenter. The team should work towards editing by reviewer being the exception rather than the majority.  2) While all reports are ultimately subject to review and prioritisation happens in practice, there is no documented 'triage' process for articulating prioritisation or required timeliness for various types of incidents. Formalisation in this area would add clarity and benchmark KPIs.

On an annual basis, a sample of 50 Incident Reports (including incidents classified as 'crime' and 'non-crime', and related calls from AGS members in some cases), previously reviewed by each GISC DQ Review Officer, are reviewed by a HEO member of the GISC team for completeness, accuracy, appropriateness, and timely review.	In place	
Any issues noted are addressed and fed back to the relevant DQ Review Officer, their line manager, and the team more broadly as appropriate.  Evidence of this review activity is retained on team share drives.		

Ongoing incident investigation activity is not recorded on Pulse appropriately, accurately, completely or on a timely basis.	On a periodic basis [daily/weekly/monthly, depending on PAF operating rhythm] basis, AGS members update Pulse for investigation process post [Divisional/District] PAF meetings which discuss ongoing investigations. Evidence of these updates are retained in the Pulse audit trail.	In place but opportunities to improve	This is a process rather than a control. Per conversations with GISC, the Incident Management System has a standardised, systematic approach to incident management across the force which has been rolled out to different divisions since 2019 to replace the precursor PULSE Incident Management approach.  There is an opportunity to further improve technology so that PAF meetings are driven by system reporting and minutes/actions captured in a manner that can be fed back into systems of record efficiently (and any gaps addressed or escalated appropriately). We understand that a PAF E-tool is being piloted to this end.  While these systems are being rolled out more broadly, local oversight should ensure PAF meetings should be minuted with actions identified and completion confirmed prior to subsequent meeting.
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	On an ongoing basis, senior management review 'Process Behaviour Analysis' to identify material changes in data and related activities. Reports have inbuilt RAG status for various performance metrics. Included in these KPIs are metrics for timely review and update of PULSE records for 1) sexual offences and 2) all other crime incidents. The KPIs identify the % of incidents where there is a review date that is not overdue by more than seven days.	In place but opportunities to improve	While this data is available at various levels and to various members of senior AGS management, there's no mechanism to ensure that KPIs that fall below target are appropriately escalated and addressed. The data is also at a high level, focussing on %ages rather than specific records that are required to be updated on a more timely basis. Potential for this controls to be improved by bringing greater insight into PAF sessions for incidents requiring review.  The key things to ensure are 1) there is an appropriate mechanism and guidance for identifying and recording review requirements 2) there is a mechanism in place for reminding the recording member and their direct supervisor to update the incident.
Insufficient GISC resources to input, update and review Incident Reports in a timely manner to the required standard.	On a weekly basis, the Head of GISC reviews statistical information and analysis comparing the status of records processing with equivalent historic statistics and target KPIs; to understand whether sufficient resources are in place to meet the needs of the organisation and identify any divergences from expectations.  Evidence of this review of the information is retained in the relevant PowerPoint presentations.	In place	Consider 1) identifying amber and red thresholds for escalation and 2) formal evidence of review and sign off by Head of GISC.

#### Disclaimer

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