

Australia New Zealand Policing Advisory Agency



FORENSIC INTELLIGENCE (FORINT) SPECIALIST ADVISORY GROUP

# FORENSIC INTELLIGENCE LEXICON

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A document prepared by the Australian New Zealand Forensic Science Community

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### **Document Control**

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#### Acknowledgments

This document was prepared by the Forensic Intelligence Specialist Advisory Group.

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## INTRODUCTION

The Australia New Zealand Forensic Intelligence (FORINT) Specialist Advisory Group (SAG) commenced as a community of interest in 2020 and was formally established as a SAG in October 2021, to encourage national and Trans-Tasman collaboration around forensic intelligence capability, including the shaping and promotion of consistency in doctrine and lexicon. The FORINT SAG is comprised of members from Australia New Zealand Forensic Executive Committee (ANZFEC) agencies and represents the collective Australian New Zealand forensic intelligence community. The following lexicon, developed by the FORINT SAG, represents agreed definitions for commonly used forensic intelligence language within the Australia New Zealand forensic intelligence community. It is intended as a reference for use within the FORINT SAG to help guide discussions and minimise semantic barriers. It is acknowledged that similar documents may exist within individual jurisdictions and/or agencies. The FORINT SAG does not intend that this lexicon replace pre-existing local lexicon, however agencies looking at developing or refining standardised forensic intelligence terminology are encouraged to consider this document as a point of reference. It may be a useful tool in enhancing communication and clarifying information shared between forensic laboratory personnel and investigators, within and across jurisdictions. The document is designed to support a more united and uniformed approach to discussions around current and developing forensic intelligence capability.

### **DEFINITION OF FORENSIC INTELLIGENCE**

The FORINT SAG endorses the following definition of Forensic Intelligence:

"Forensic intelligence is intelligence derived from technical and forensic information and expertise".

Where, intelligence as a process involves planning, information collection and collation, analysis and dissemination; as an output it is a product derived from adding value to information, to provide insight and influence decision making. Forensic Intelligence may also be used to describe the team or capability that produces forensic intelligence as an output. The short definition employed here is consistent with that of other specialist intelligence capabilities.<sup>1</sup> Forensic findings (regardless of confidence level or likelihood ratio) constitute information that becomes the source for the FORINT capability, which generates outputs – informed by scientific fluency – through the intelligence cycle. Importantly, FORINT is not a lower standard of evidence, nor something simply produced promptly or without full review, nor something 'not intended for court' (though such information may contribute to FORINT assessments). FORINT outputs postulate insightful propositions typically at the offence/activity level, supported by premises derived from forensic/technical (and other) information.

### **CORE LEXICON**

The following table lists several core terms that are routinely employed within an operational forensic intelligence context. This list is subject to continual refinement.

#### Footnotes

<sup>&</sup>lt;sup>1</sup> NATO (2020). NATO Glossary of Terms and Definitions (English and French). Brussels, Belgium, North Atlantic Treaty Organisation / Organisation du Traite de L'Atlantique Nord.



### Definitions of key terms routinely used in a forensic intelligence context.

Term	Meaning
Actionable	Intelligence that is directly useful to decision makers, such as investigators, leadership or forensic scientists.
All-source	Intelligence assessment or activity that holistically incorporates all appropriate available sources of information in production.
Attributes	The descriptive characteristics or properties that define entities in a relational database, such as the modus operandi of a crime event or the calibre of a recovered ammunition cartridge. Attributes may inform the inferential linking of entities in a FORINT context.
Confidence Level	Regarding forensic information, the statistical probability that the value of a given parameter falls within a specified range. See also Verbal Scale.
Data	Data (singular: datum) are units of information collected through observation or measurement and may be quantitative or qualitative.
Database	An organised collection of data stored and accessed electronically from a computer system, used in this context to record and query information for intelligence purposes.
Evidence	In general, the body of facts or information indicating whether a belief or proposition is true o valid. Lends support to an investigation.
Evidence, Physical	Tangible objects or materials of any size that are of value to an investigation. Generally, physical evidence can be examined and re-examined.
Evidence, Trace	A form of physical evidence that is present in limited quantities and is often exhausted upon initial examination and/or testing. Generally produced through physical contact between entities, examples may include DNA, hair or fibres.
Exploitation	The application of scientific, technical and other methods to derive data and information from collected materials for intelligence and/or judicial purposes.
Identification	The establishment of a link between entities, where one entity is a person; for example, between a recovered DNA profile and a person's reference profile.
Information	Information is processed data, such as financial records, human source reports, and forensic findings. Information includes data that may have been processed to provide meaning, but not analysed to provide contextual meaning with respect to operational propositions/implications.
Initiator <sup>2</sup>	The impetus for commencing a forensic intelligence probe. Usually a type of finding, or the meeting of a threshold or variable state.
Intelligence	As a process: Intelligence involves planning, information collection and collation, analysis and dissemination. As an output: Intelligence is a product derived from adding value to information, to provide
	insight and influence decision making.
Intelligence, Forensic	Forensic intelligence (FORINT) is intelligence derived from technical and forensic information and expertise.
Intelligence, Identity	The analysis and use of personal information, including biometric and forensic among others, to identify intelligence targets of interest.
Investigation	A person- or agency-led inquiry into a potential criminal act. Conducted by an investigator, being a person or agency who is tasked with conducting an investigation (whether forensic, legal or criminal).
Likelihood Ratio	The likelihood ratio is a numerical expression of support for one proposition relative to another within a Bayesian framework, indicating the diagnosticity of information.

### Footnotes

<sup>2</sup> Note that in other contexts (including FORINT data schemas) an 'initiator' may refer to a component of an explosive train.





Term	Meaning
Link	A connection between entities, especially within a network; in network parlance, an edge that connects vertices. Links indicating entity relationships may be established through any number of means; forensic-domain examples include DNA, chemical profile, and tool-mark links. See also Scene-to-Scene Link. Note that strength is a typical property of a link (e.g. tentative or confirmed).
Link, Scene-to-Scene	A link between unidentified entities, such as a link between two recovered DNA profiles without a corresponding reference profile. Aka. Crime-to-Crime Link. See also Link.
Operational	The operational level focuses on the illumination of criminal networks and pervasive problems, across crime types and jurisdictional borders, identifying opportunities and options for the leadership cohort. Recommendations may include such matters as prioritisation, resourcing, and greater crime reduction strategies – not just proximate actions (e.g. arrest warrant in relation to a specific crime).
Reporting, Early/rapid	Information that is provided promptly, potentially without undergoing all typical procedures or reviews and therefore subject to elevated risk or uncertainty.
Reporting, Sub- threshold	Forensic information that does not meet the 'typical' thresholds for reporting but may nonetheless have diagnostic value, albeit potentially with atypically high uncertainty.
Screening	A preliminary forensic evaluation, and information produced thereby, which may be indicative or presumptive and provide a positive or negative indication. Aka. Field Testing.
Strategic	The strategic level is concerned with matters such as the broader criminal environment, emerging trends, high-level policy, and so on. The audience for such assessments are typically senior leadership, whose decision-making affects the operational and capability posture of the law enforcement agency.
Tactical	The tactical level is focused on specifics of target entities, opportunities and the identification of new leads. This intelligence is generally produced in a short time scale in support of frontline policing or investigators undertaking case-specific actions.
Unidentified	The state of not having a known or established identity. Refers to forensic material that does not have an established correspondence to the source individual, such as a recovered trace DNA profile that has not been matched to the donor individual, but may be linked to other recovered traces.
Verbal Scale	A suite of terms used in forensic evaluation, generally corresponding to numerical ranges, which express the support for or against a given proposition. See also Words of Estimative Probability, which is conceptually similar.
Words of Estimative Probability	Standardised terms that convey the likelihood of an assessed state or matter in a clear and consistent manner, which may have corresponding quantitative metrics. See also Verbal Scale, which is conceptually similar.



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ANZPAA NIFS is responsible for the management and co-ordination of the Specialist Advisory Groups and has reporting accountability to the Australia New Zealand Forensic Executive Committee (ANZFEC).

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