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**Forensic sciences —**

**Part 1:  
Terms and definitions**

*Criminalistique —*

*Partie 1: Termes et définitions*

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 272, *Forensic sciences*.

A list of all parts in the ISO 21043 series can be found on the ISO website.

## Introduction

The development of international standards for forensic science is important to enhance the reliability, transparency and confidence in forensic evidence. Standards will harmonize work practices to facilitate forensic facilities from different countries to work collaboratively in response to cross border investigations. They will also enable facilities from different countries to support one another in the event of a catastrophic event that exhausts a country's capabilities.

Standards will also facilitate the exchange of forensic results, information and intelligence, including the sharing of databases, to ensure forensic services are fit for purpose. Standardization in the manner that forensic evidence is collected, analysed, interpreted and reported is critical to the common approach to how evidence is utilized. This enables the sharing of information and intelligence among jurisdictions, to successfully exonerate the innocent or prosecute perpetrators.

Consistent and accepted standards within the forensic community will benefit all users of the criminal justice system including members of the public as well as legal and forensic practitioners. Recent issues in various countries illustrate the benefits that standards could provide, particularly in the pattern matching sciences such as hair analysis, DNA interpretation and fingerprints.

Conformance to a platform of relevant standards for law enforcement and forensic disciplines would ensure that methodologies are robust, repeatable and validated, and that training across jurisdictions is consistent. This would have a direct bearing on the quality of scientific evidence presented in the courts, and would increase the likelihood of successful justice outcomes.

This document is part of a series which, when completed, will include the different components of the forensic process from scene to courtroom (as illustrated in [Figure 1](#)). The series describes primarily "what" is standardized, not the "how" or "who". Best practice manuals and standard operating procedures should describe "how" the requirements of this document would be met. National regulations and policies will determine "who" should meet the requirements of this series.

This document provides a vocabulary that standardizes the use and meaning of terms associated with the forensic sciences. These terms are drawn from standard terms used in the forensic science processes, as contained in the core forensic standards developed to date. Discipline-specific standards will include their own specific vocabulary.

This document is organized alphabetically and follows natural (English) word order wherever possible. The source documents for the definitions are International Standards developed by ISO/TC 272. Where possible, users are advised to verify whether a more recent edition of the source document has been published, which contains an updated version of the terms and definitions. Future versions of this document will include updated terms and definitions consistent with the source documents at the time the revision is prepared.

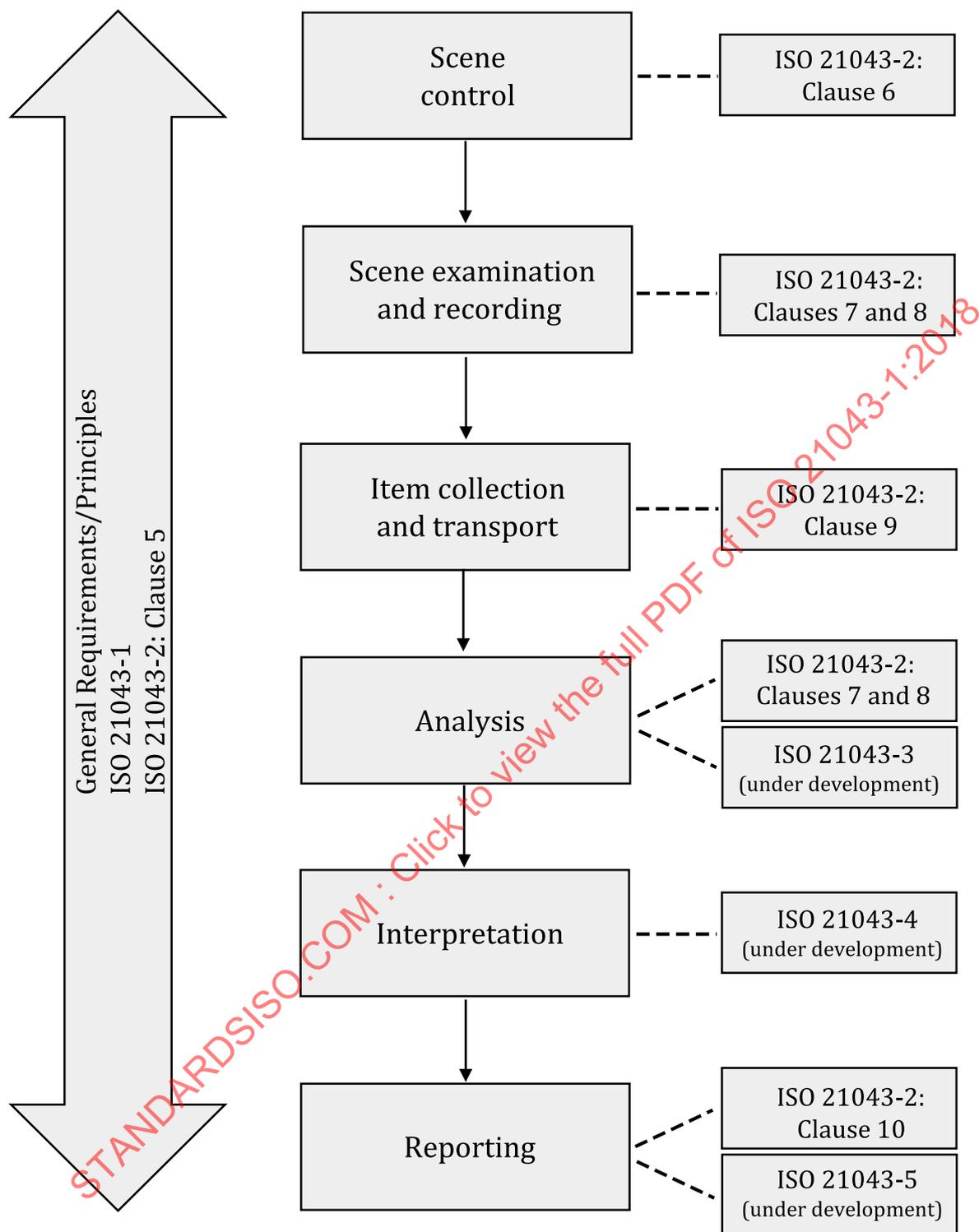


Figure 1 — Relationship between the various components in the forensic process and the clauses within the ISO 21043 series

# Forensic sciences —

## Part 1: Terms and definitions

### 1 Scope

This document defines terms used in the ISO 21043 series of standards.

### 2 Normative references

There are no normative references cited in this document.

### 3 Terms and definitions

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

#### 3.1

##### **chain of custody**

chronological *record* (3.23) of the handling and storage of an *item* (3.19) from its point of collection to its final return or disposal

Note 1 to entry: Chain of custody is one element that contributes to the integrity of an *item* (3.19).

#### 3.2

##### **consumable**

single use or limited use material which is used in the *forensic process* (3.15)

#### 3.3

##### **contamination**

undesirable introduction of a substance to an *item* (3.19) at any point in the *forensic process* (3.15)

Note 1 to entry: This includes undesirable transfer of a substance within an item or between *items* (3.19) (also referred to as cross-contamination).

#### 3.4

##### **control sample**

material with known properties, analysed in order to evaluate the performance of the test and to ascertain that the data obtained are valid

#### 3.5

##### **customer**

client, authority, organization or person(s) requesting the *forensic* (3.14) services

#### 3.6

##### **document**

information and the medium on which it is contained

EXAMPLE Specification, procedure document, policy, instruction or form, drawing, *record* (3.23), *report* (3.26), standard, flowchart.

## ISO 21043-1:2018(E)

Note 1 to entry: The medium can be paper, magnetic, electronic or optical computer disc, photograph, or a combination thereof.

Note 2 to entry: A set of documents, for example specifications and *records* (3.23), is frequently called “documentation”.

[SOURCE: ISO 9000:2015, modified]

### 3.7 document control

system to establish, approve, issue, maintain, distribute, use, change, store, secure and dispose of *documents* (3.6)

Note 1 to entry: *Records* (3.23) are covered under *record control* (3.24).

### 3.8 enhancement

process to reveal, intensify, magnify or clarify an observation or result

### 3.9 examination

act or process of observing, searching, detecting, recording, prioritizing, collecting, analysing, measuring, comparing and/or interpreting

Note 1 to entry: Examination can include collecting *items* (3.19) from persons.

### 3.10 examination strategy

plan developed to specify the requirements and activities for the *examination* (3.9) phase of a *forensic process* (3.15)

Note 1 to entry: An examination strategy can be applied to an investigation scene (3.29), the *examination* (3.9) of an *item(s)* (3.19) or sequential multi-discipline testing on an *item(s)* (3.19).

### 3.11 facility

physical environment used to protect the *item* (3.19) integrity, conduct testing, or support any other aspect of the *forensic process* (3.15)

EXAMPLE Buildings, designated area, tents, storage areas, mobile office or laboratories and vehicles.

### 3.12 finding

information concluded as a result of an *examination* (3.9)

### 3.13 first responder

first law enforcement personnel arriving at a *scene* (3.29) responsible for immediate action

### 3.14 forensic

related to methods, techniques and processes used to establish conclusions and/or opinions, facts and *findings* (3.12), which can be used for legal proceedings

### 3.15 forensic process

set of interrelated or interacting *forensic* (3.14) activities

Note 1 to entry: The forensic process can include *item* (3.19) handling and control, *examination* (3.9), reporting, and testimony.

**3.16****forensic service provider**

organization or individual that conducts and/or supplies *forensic* (3.14) services

**3.17****impartiality**

objectivity, neutrality and fairness along with the awareness of bias and reduction of prejudice

Note 1 to entry: It is important for impartiality that possible conflicts of interest are declared, resolved or do not exist.

**3.18****interpretation**

use of professional judgement to provide conclusions and/or opinions on hypotheses, based on *findings* (3.12) and information gathered through the *forensic process* (3.15)

**3.19****item**

object, substance or material that is collected, derived or sampled as part of the *forensic process* (3.15)

**3.20****peer review**

evaluation of the *reports* (3.26), *examinations* (3.9), notes, data and *findings* (3.12) by others competent in the same field to assess that there is an appropriate and sufficient basis for the conclusions and/or opinions

**3.21****quality**

degree to which a set of inherent characteristics fulfils a requirement

[SOURCE: ISO 9000:2015, 3.6.2, modified]

**3.22****recognition**

identification of *items* (3.19) or characteristics that can have potential *forensic* (3.14) value

**3.23****record**

*document* (3.6) providing information on observations or activities performed

**3.24****record control**

system used to ensure traceability and to identify, store, protect, retrieve, retain and dispose of *record(s)* (3.23)

**3.25****reference sample****reference specimen**

material from a known source used for comparison purposes in a *forensic process* (3.15)

Note 1 to entry: This includes biological material taken from a person (e.g. hair, blood, saliva), and non-biological material (e.g. carpet, paint, fabric).

Note 2 to entry: A reference sample can be taken from an *item* (3.19) in order to ensure the *substrate* (3.31) has no adverse effect on the performance of the test.

Note 3 to entry: A reference sample can be used to address the question of the source of an unknown *sample* (3.28), one would compare the unknown *sample* (3.28) with a reference sample.