BSI (British Standards Institution) – Supplementary written evidence (FRS0103)

BSI and standards:

Supplementary information to answers supplied in committee on 11 December 2018

1. BSI is the UK’s National Standards Body, incorporated by Royal Charter and responsible for preparing British Standards and related publications and for coordinating the input of UK experts to European and international standards committees. BSI has over 115 years of experience in serving the interest of a wide range of stakeholders including government, business and society.

2. As the UK’s National Standards Body, BSI operates in accordance with a Memorandum of Understanding with the UK Government. Our robust standards development process requires open and full consultation with stakeholders to build consensus-based outcomes. This gives standards the legitimacy and degree of market acceptance to be used for public policy purposes.

3. BSI represents the UK view on standards in Europe (via the European Standards Organizations CEN and CENELEC) and internationally (via ISO and IEC).

4. BSI is responsible for maintaining the integrity of the national standards-making system for the benefit of UK industry and society and for ensuring that standards developed by UK experts meet international expectations of open consultation, stakeholder involvement and market relevance.

5. British Standards and UK implementations of CEN/CENELEC or ISO/IEC standards set out “what good looks like”. Each standard is kept current through a process of maintenance and review whereby it is updated, revised or withdrawn as necessary.

6. Standards are designed to set out clear and unambiguous provisions and objectives. Although standards are voluntary and separate from legal and regulatory systems, they can be used to support or complement legislation.

Question raised by Lord Fox asking who proposed the new international standards on forensic sciences (ISO 21043-1:2018)

Answer:

- The ISO 20143 series of standards are new – only 2 have been published so far (in 2018) and 3 more will shortly be available for public consultation, when any stakeholder can access the draft from BSI’s website and submit comments. Further information on the ISO 20143 series of standards is provided in the annex to this document.
The ISO 21043 series of standards were proposed by the Australian Standards Body, Standards Australia, which holds the secretariat of the ISO technical committee on forensic sciences (TC 272).

It should be noted that the proposer of an international Standard (or a National Standard) is not the decision maker as to whether a Standard is developed or subsequently published by the National Bodies.

The ISO/IEC directives, set out criteria for international standardization activities. Proposals for international Standards submitted by National Bodies are made in response to stakeholder needs, often based on existing National Standards.

A proposal for a Standard must be presented with full justification (including its market relevance and need) and, if it meets the criteria for a new work item (specifically, a need is evidenced and there is no existing standard), then the proposal is sent out for ballot of the other National Bodies (i.e. the members of ISO).

The National Bodies then consult their own experts and the technical committees that mirror the work in international committees. They, in turn, advise their National Bodies of whether they agree that there is a need for a Standard. The National Bodies vote on whether to proceed with development.

Once the Standard has been developed, and if National Body experts have been involved in its development, it is usually adopted as a national version of the international standard (i.e. as a BS ISO – or BS EN ISO if also adopted by European Standards Bodies CEN/CENELEC)

Subject specific standards on forensic science issues are designed to support stakeholders in carrying out their operations. This does not affect the system of accreditation managed by UKAS, based on BS EN ISO 17025: 2017 General requirements for the competence of testing and calibration laboratories.

The UK committee for forensic science processes [title: FSM/1 – forensic science processes] develops UK national Standards and mirrors the work of ISO Technical Committee (TC) 272 on forensic science. Further information on the scope and membership of the committee FSM/1 is provided in the annex to this document.

The different stages of development of a Standard allow opportunities for both expert stakeholders and National Bodies to input into the content of the Standard – with 3 new international standards currently in development, as noted below, UK stakeholders will have the chance to comment and propose amendments to drafts.
Question raised by Lord Renfrew of Kaimsthorn: “More particularly, are there standards that are particularly applicable to digital forensics that could be further defined and explored? ”.

Answer:

- Currently BSI is participating in developing international standards which will be applicable for digital forensics (ISO 21043, parts 3, 4 and 5 – see Annex for details).
- Anyone with relevant interests in the area can propose a standard to BSI for development, if a need has been identified and justified. Proposals can be for both national and/or international standards.

20 December 2018

Annex:

Information on existing and developing forensic science Standards

FSM/1 - Forensic Science Processes

Scope: Under the direction of the Standards Policy & Strategy Committee, is responsible for the UK input into CEN/TC 419 and ISO/TC 272, and is also responsible for the preparation, publication and review of British Standards for forensic science services.

Organisations represented in the committee:

- Forensic Science Regulator (Chair)
- United Kingdom Accreditation Service (Deputy Chair)
- Home Office
- Chartered Society of Forensic Sciences
- Association of Forensic Service Providers
- S P A – Scottish Police Authority
- Metropolitan Police
- Forensic Institute Research Network
- Defence Science and Technology Laboratory
- Forensic Science Northern Ireland
- Hertfordshire, Bedfordshire and Cambridgeshire Police

Published standards:
BS ISO 18385:2016 is the world’s first international standard on forensic science and outlines the requirements for the manufacture of kits and consumables for DNA analysis by the global forensic science community.

**Who is this standard for?**
- Police forces and forensic science laboratories
- Manufacturers for the forensic DNA community

**Why should you use this standard?**
ISO 18385:2016 is being recognized internationally as setting the standard for the forensic DNA community.

The standard is important because:
- In forensic DNA analysis contamination is inevitable and the quality of consumables used in the recovery and processing of DNA material has been recognized as a route for the introduction of contamination
- It helps to avoid incidents such as the “The Phantom of Heilbronn” or “Woman without a Face”
- End users will be able to purchase consumables with confidence from manufacturers meeting the standard and satisfy the requirements of their own accreditation to ISO 17025 and manufacturers will understand what is required of them to service this market

- BS ISO 21043-1:2018 Forensic sciences. Part 1: Terms and definitions

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

- BS ISO 21043-2:2018 Forensic sciences. Part 2: Recognition, recording, collecting, transport and storage of material
Standards under development:

NB input and comments are encouraged on the following standards once they reach the Public Consultation stage, which will be accessible via the BSI drafts website.

- ISO/NP 20964 Specification for consumables used in forensic process -- Requirements for product manufacturing and kit assembly

**Why should you use this standard?**

This document also includes quality requirements. This document is not applicable to procedures for the recovery of data from digital storage media which is covered by ISO/IEC 27037. However, the storage medium itself can yield additional items of forensic value (e.g. fingerprints or DNA).

**Standards under development:**

NB input and comments are encouraged on the following standards once they reach the Public Consultation stage, which will be accessible via the BSI drafts website.

- ISO/NP 20964 Specification for consumables used in forensic process -- Requirements for product manufacturing and kit assembly

This International Standard specifies requirements for:

a) consumables used in the collection, preservation and processing of material for forensic analysis;

b) the manufacture of these consumables; and

c) the assembly of forensic kits.

This International Standard is not intended to cover technical product specifications for consumables, although it could be used to assist in developing a technical product specification.
- BS ISO 21043-3 Forensic Analysis. Part 3: Analysis and examination of material

This Standard specifies requirements for the forensic examination and analysis of items from crime scenes, persons and related areas and objects. This involves one or more of the following steps:

a) recording;
b) sampling;
c) presumptive testing or assessment;
d) instrumental analysis;
e) comparisons;
f) recording results.

NOTE: It should be noted that though the analysis of digital or analogue electronic evidence is excluded from the scope of this Standard, such digital evidence may be accompanied by or contained within physical media or equipment having possible evidential value.

- BS ISO 21043-4 Forensic Analysis. Part 4: Interpretation

The purpose of this Standard is to set out standard practices for the recognition, recording, recovery, transport and storage of physical material from crime scenes in order to preserve its integrity for forensic purposes.

The committee is working on a series which, when complete, will include—
Part 1: Terms and definitions
Part 2: Recognition, recording, collection and storage of material
Part 3: Analysis and examination of material
Part 4: Interpretation (this Standard)
Part 5: Reporting
This Standard sets out requirements and recommendations for the reporting of results and opinions, derived from scientific data and observation in the analysis and examination of physical material, for investigative purposes and which may be used in legal proceedings. The areas covered by this document include the following:

(a) Report types.
(b) Case file and report review.
(c) Reporting of results.
(d) Reporting of opinions.
(e) The processes of review and reporting apply to results and opinions.

Though intended primarily for use in reporting the forensic analysis of physical material, this Standard may also apply to the reporting of the forensic analysis of digital evidence.

- BS ISO 21043-5 Forensic Sciences. Part 5: Reporting

References/links:

BS 0: A standard for standards: Principles of standardization

This British Standard sets out the principles of standardization undertaken by the British Standards Institution (BSI) in its role as the UK National Standards Body (NSB).

The principles encompass the development, publication, maintenance and application of British Standards and related standardization documents, together with the UK’s participation in European and international standardization.

ISO/IEC Directives:

ISO/IEC Directives Part 1 and Consolidated ISO Supplement

Official procedures to be followed when developing and maintaining an International Standard and procedures specific to ISO.