



Your ref. ISO/TMB/TS/P 246
Our ref.

Date 2014-10-17

TS/P 246: Proposal to transform ISO/PC 272 *Forensic sciences* into a TC

Dear ISO Members,

Please find attached a proposal for a new field of technical activity on *Forensic sciences*, submitted by SA (Australia).

Note that this proposal is for the conversion of an existing Project Committee (which was established to develop an individual standard) into a Technical Committee (which will have a broader scope and programme of work). According to clause 1.10 of the ISO/IEC Directives, a PC wishing to be transformed into a TC shall follow the process for the establishment of a new TC.

All ISO members are therefore invited to vote on this proposal for the creation of a new TC, using the e-balloting system, until **17 January 2015**.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'S. Clivio'.

Sophie Clivio,
Secretary of the Technical Management Board



PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY	
Circulation date: 2014-10-17	Reference number (to be given by Central Secretariat)
Closing date for voting: 2015-01-17	
Proposer SA (Australia)	ISO/TS/P 246

A proposal for a new field of technical activity shall be submitted to the Central Secretariat, which will assign it a reference number and process the proposal in accordance with the ISO/IEC Directives (part 1, subclause 1.5). The proposer may be a member body of ISO, a technical committee or subcommittee, the Technical Management Board or a General Assembly committee, the Secretary-General, a body responsible for managing a certification system operating under the auspices of ISO, or another international organization with national body membership. Guidelines for proposing and justifying a new field of technical activity are given in the ISO/IEC Directives (part 1, Annex C).

The proposal (to be completed by the proposer)

<p>Title of the proposed new committee (The title shall indicate clearly yet concisely the new field of technical activity which the proposal is intended to cover.)</p> <p>Technical Committee - Forensic Sciences</p>
<p>Scope statement of the proposed new committee (The scope shall precisely define the limits of the field of activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned.)</p> <p>Standardization and guidance in the field of Forensic Science. This includes the development of standards that pertain to laboratory and field based forensic science techniques and methodology in broad general areas such as the detection and collection of physical evidence, the subsequent analysis and interpretation of the evidence, and the reporting of results and findings.</p> <p>Excludes</p> <ul style="list-style-type: none">• Generic quality management standards dealt with by ISO/TC 176• Conformity assessment guidelines dealt with by the ISO committee on conformity assessment (CASCO)

Proposed initial programme of work (The proposed programme of work shall correspond to and clearly reflect the aims of the standardization activities and shall, therefore, show the relationship between the subject proposed. Each item on the programme of work shall be defined by both the subject aspect(s) to be standardized (for products, for example, the items would be the types of products, characteristics, other requirements, data to be supplied, test methods, etc.). Supplementary justification may be combined with particular items in the programme of work. The proposed programme of work shall also suggest priorities and target dates.

Forensic Science includes a wide range of distinct disciplines that undertake a mixture of qualitative, quantitative and comparative testing. Some simply report the results of empirical testing whilst others make an assessment of the data observed based on experience or statistical analysis. When viewed from a process point of view, forensic analysis generally consists of up to four stages including:

1. Detection, collection, storage and transport of material (sampling).
2. Examination and analysis of material.
3. Possible interpretation of the results of examination and analysis.
4. Reporting of the results and conclusions.

Within each of these stages there are generic requirements that must be satisfied in order to preserve the integrity of the evidence. It is possible to develop general requirements for each stage that are relevant to all or most disciplines. The development of such generic standards would prevent duplication of effort should discipline specific standards be later progressed. A vocabulary standard would also be of great value to define the terms and definitions commonly used in forensic science.

As a result it is recommended that the first of the standards be developed, followed by additional standards to commence at a later, staggered stage.

The impact of collection on downstream testing depends on the nature of the material including quantity, homogeneity and stability. Within some areas of testing it is critical whilst in others it has low impact. The examination and analytical stage is critical to every forensic discipline, regardless of whether or not interpretation follows. Errors at this stage can result in misinterpretation and the reporting of incorrect results and conclusions. As a result the development of standards on the vocabulary and for the collection of forensic evidence and also analysis and examination would have the highest priority and should be developed as the first bodies of work.

In addition a technical report on the interpretation of ISO/DIS 18385 when published as a companion document for the implementation of the Standard should also be developed.

It is anticipated that these standards will take 36 months to develop concurrently. The suggested completion date would be 2018.

Indication(s) of the preferred type or types of deliverable(s) to be produced under the proposal (This may be combined with the "Proposed initial programme of work" if more convenient.)

as above

A listing of relevant existing documents at the international, regional and national levels. (Any known relevant document (such as standards and regulations) shall be listed, regardless of their source and should be accompanied by an indication of their significance.)

The following four Australian Standards are of great significance as they can be used as an initial draft for the development of international standards

AS5388.1 Forensic Analysis. Part 1: Recognition, recording, recovery, transport and storage of material

AS5388.2 Forensic Analysis. Part 2: Analysis and examination of material.

AS5388.3 Forensic Analysis. Part 4. Interpretation

AS5388.4 Forensic Analysis. Part 5. Reporting.

The following Australian Standard could be used as a basis for the further development of discipline specific standards:

AS5239 Examination of ignitable liquids in fire debris

A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing ISO and IEC deliverables. (The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized. If seemingly similar or related work is already in the scope of other committees of the organization or in other organizations, the proposed scope shall distinguish between the proposed work and the other work. The proposer shall indicate whether his or her proposal could be dealt with by widening the scope of an existing committee or by establishing a new committee.)

ISO/IEC is currently working to develop standards that effect forensic science, however these are not generally in areas that cover the majority of the forensic science disciplines specifically. ISO 17025 and ISO 17020 are used by most forensic laboratories for accreditation purposes, however these standards are for overall quality management with a focus on documentation. In this benchmarks for quality forensic services are missed.

ISO JTC 1 is conducted work in the electronic evidence space and release ISO/IEC 27037:2012 'Information technology -- Security techniques -- Guidelines for identification, collection, acquisition and preservation of digital evidence' in 2012. This standard provides guidelines for specific activities in the handling of digital evidence, which are identification, collection, acquisition and preservation of potential digital evidence that can be of evidential value. This standard however is applicable in a specific sector of forensic science computer forensics and cannot be more broadly applied.

The work proposed in this application builds upon the current work of ISO PC272 in the development of ISO/DIS 18385 Minimizing the risk of DNA contamination in products used to collect and analyze biological material for forensic purposes. As a result it is proposed that this committee be continued and expanded to complete this body of work.

A listing of relevant countries where the subject of the proposal is important to their national commercial interests.

This proposal would be important to all ISO member countries.

A listing of relevant external international organizations or internal parties (other ISO and/or IEC committees) to be engaged as liaisons in the development of the deliverable(s). (In order to avoid conflict with, or duplication of efforts of, other bodies, it is important to indicate all points of possible conflict or overlap. The result of any communication with other interested bodies shall also be included.)

CEN/PC 419: Forensic science processes
CEN/TC 140: In-vitro Diagnostic Medical Devices;
CEN/TC 275/WG 11: Genetically modified foodstuffs;
CEN/TC 316: Medical Products Utilizing Cells, Tissues and/or their derivatives ;
CEN/TC 411: Bio-Based Products;
ISO/JTC 1
ISO/TC 34/SC 9: Microbiology
ISO/TC 34/SC 16: Horizontal Methods for Molecular Biomarker Analysis;
ISO/TC 48: Laboratory equipment;
ISO/TC 76: Transfusion, infusion and injection
ISO/TC147: Water quality;
ISO/TC 150/SC 7: Tissue-engineered medical products;
ISO/TC 176: Quality Management
ISO/TC 184: Automation systems and integration;
ISO/TC 190: Soil Quality
ISO/TC 194/SC 1: Tissue product safety;
ISO/TC 198: Sterilization of health care products
ISOTC 201: Surface chemical analysis
ISO/TC 209: Cleanrooms and associated controlled environments
ISO/TC 212: Clinical Laboratory testing and in vitro Diagnostic Test Systems;
ISO/TC 215: Health informatics;
ISO/TC 262: Risk Management
ISO/TC 276: Biotechnology

A simple and concise statement identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) and how they will each benefit from or be impacted by the proposed deliverable(s).

The proposed program of work in the following areas:

1. Detection, collection, storage and transport of material (sampling).
2. Examination and analysis of material.
3. Possible interpretation of the results of examination and analysis.
4. Reporting of the results and conclusions.

will benefit forensic practitioners, law enforcement members, legal practitioners, the justice system, judges and laypersons who become involved in legal proceedings. In particular, the proposed standards will help provide reliable justice outcomes by ensuring that there are consistent and reliable practices in place across and between all member countries.

These Standards will assist medium sized non-government and government agencies by improving portability of staff and allowing agencies to work together in response to cross jurisdictional matters. Smaller organisations will benefit by being able to assure quality by adhering to world recognised standards without the need for expensive third party accreditation.

An expression of commitment from the proposer to provide the committee secretariat if the proposal succeeds.

Standards Australia is committed to providing committee secretariat should the proposal succeed

Purpose and justification for the proposal. (The purpose and justification of the standard to be prepared shall be made clear and the need for standardization of each aspect (such as characteristics) to be included in the standard shall be justified. Clause C.4.12.1 through C.4.12.10 of Annex C of the ISO/IEC Directives, Part 1 contain a menu of suggestions or ideas for possible documentation to support and purpose and justification of proposals. Proposers should consider these suggestions, but they are not limited to them, nor are they required to comply strictly with them. What is most important is that proposers develop and provide purpose and justification information that is most relevant to their proposals and that makes a substantial business case for the market relevance and the need for their proposals. Thorough, well-developed and robust purpose and justification documentation will lead to more informed consideration of proposals and ultimately their possible success in the ISO IEC system.)

There is currently a lack of agreed formal international standards for the conduct of forensic analysis.. There have been a number of incidents (particularly in relation to DNA analysis) that have highlighted the negative impact that the lack of agreed standards in forensic science can have.

Compliance 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.

Consistent and accepted standards within the forensic community will benefit all users of the judicial system including members of the public as well as legal and forensic practitioners. The establishment of Standard procedures would reduce the risk of miscarriages of justice, therefore there is the potential for significant savings to the community with respect to the costs of re-trials or other litigious processes.

As more forensic information is being collected on international databases (fingerprint, DNA and other biometric datatbase), the importance of standardised protocols for collection, storage, analysis and interpretation is of critical importance to ensure that the data collected is reliable and interpretations are based on comparable technologies and techniques.

Recognised standards facilitates professional mobility. This is a direct consequence of standards and standardisation. Professional mobility has many advantages in times when a rapid response is required to scenes of major crime or disaster which are beyond the means and capabilities of any one jurisdiction (eg multi-jurisdictional responses to MH17 crash site). The ability to mobilise a multi-jurisdictional forensic response with consistent training and knowledge to major incidents provides for better outcomes in less time with less cost (due to the concomitant reduction in resource intensive training and revision of variations in protocols). This enhances national and international capacity and capability and enhances growth of both the individuals and forensic disciplines.

The existence of a forensic standard would benefit smaller forensic service providers and individual practitioners that are currently providing niche forensic services to the public and the judicial system. Currently, smaller non-government service providers are unable to meet the cost of external accreditation (both the cost of compliance and assessment) and are looking for guidance in developing procedures and protocols that would ensure legal acceptability and consumer confidence, within the constraints of their environment. Without any standard practice to follow, there is a significant risk that such evidence may be tainted and therefore be rendered inadmissible in a court of law.

Additionally, the existence of national Standards would reduce the duplication that currently occurs between forensic laboratories in establishing concurrent methodologies within their own jurisdictions.

Signature of the proposer

Further information to assist with understanding the requirements for the items above can be found in the Directives, Part 1, Annex C.

Comments of the Secretary-General (to be completed by the Central Secretariat)

Signature