

## Special Report on the July SC37 Meetings in Paris

By: Cathy Tilton

(10 August 2012, Paris) Once again, ISO/IEC JTC1 SC37 subcommittee on biometrics and its working groups, met to continue their task of setting international standards related to biometrics. In July, the meetings were hosted by AFNOR, the French, national standards body, in Paris. The timing was perfect since the weekend break coincided with the Bastille Day celebrations and delegates were treated to parades and fireworks. Highlights from these meetings are provided below.



Note – for background and a key to the acronyms and stages, you may want to check out the [Getting Started article](#) on the Planet Biometrics standards page!

Before we start, one interesting trend at SC37 is the increase in joint meetings, where two or more working groups meet together on projects of mutual interest. These include the XML projects as well as the liveness project, among others. Most of the second day, plus portions of other days, were devoted to such meetings.

**WG1 – Vocabulary.** The FDIS ballot for ISO/IEC 2382-37 (the part of the JTC1 vocabulary standard dedicated to biometric terms) has been issued and is expected to close in mid-September. If the ballot passes, the vocabulary standard will go immediately to publication. (Look for a report on this during Biometrics2012.)

**WG2 – Interfaces.** The work on technical interface interoperability continues with the following progress:

- The biggest news here is the movement of ISO/IEC 30106 (Object Oriented BioAPI), parts 1 & 2 (Architecture & Java Implementation), to DIS ballot. Part 3 (C# Implementation) remained at CD.
- Also big news was the initiation of two new projects – BioAPI Parts 5 & 6 – the Function Provider Interfaces for processing and matching algorithms respectively. These were introduced by Germany.
- Likewise, a revision of ISO/IEC 24722, Technical Report on Multimodal and other biometric fusion was kicked off.
- Also, remaining at CD were the revision of ISO/IEC 19785-3, CBEFF Part 3 – Patron Formats, and ISO/IEC 30108, BIAS.
- At working draft stage are the revision of the BioAPI base standard (ISO/IEC 19784-1) and the associated conformance testing standards (ISO/IEC 24709-1 & 2), as well as the security amendment to Embedded BioAPI (ISO/IEC 29164).

**WG3 – Data Formats.** WG3 set a record, completing its work in 4 days, including joint meetings, with resolutions being read on the morning of Day 5. Included in its work program were:

- XML versions of the various parts of ISO/IEC 19794 continue to progress as a 2<sup>nd</sup> amendment to the current generation 2 (G2) of the base standard. Part 1, Framework, which sets the general requirements for all other parts, leads the way at its 2<sup>nd</sup> PDAM (Preliminary Draft Amendment – equivalent to CD).

XML versions of parts 2 (minutiae), 4 (finger image), 5 (face), 6 (iris), 7 (signature/sign), and 9 (vascular) are all at 2<sup>nd</sup> working draft stage.

- The iris sample quality project is unique in that it is defining how iris image quality is to be measured and represented as a standard (whereas the work in fingerprint and face was less rigorous and resulted in technical reports), having been informed by NIST's IREX work. This project moved to its 2<sup>nd</sup> CD. However, a revision of Part 4 (finger image sample quality) was approved with the intent to move it to a standard as well, applying the same approach as used for iris.
- Work on Level 3 conformance testing for minutiae data will move to its 5<sup>th</sup> working draft.
- One of the livelier discussions was that surrounding the liveness work. In particular, a change of title was debated and in the end, it was agreed to change the title from "Anti-Spoofing and Liveness Detection Techniques" to "Presentation Attack Detection"; however, we may not have heard the end of this quite yet. A project split (moving to multiple parts) is also being considered.
- ISO/IEC 19794-14 (DNA data) is currently in DIS ballot and therefore could not be discussed.
- Other work of WG3 includes G2 for remaining parts of 19794 (7,11), continuance of part 13 (voice), and various conformance projects related to all parts, many nearing publication.

**WG4 – Profiles.** WG4 has been working mostly on technical reports related to various biometric applications. Furthest along, moving to PDTR (Preliminary Draft Technical Report – equivalent to CD) are those related to Automated Border Control Systems and Biometric Enrolment. First working drafts of the newer projects on Mobile Biometrics and an Implementation Code of Practice (the only one intended as a full standard) are to result from this meeting. A new liaison with Frontex was also approved.



**WG5 – Performance Testing.** WG5 has become one of the more active groups within WC37. In Paris, they:

- Initiated a ballot for a new project on "Performance Testing of Template Protection Schemes".
- Moved to DTR (Draft Technical Report – equivalent of FDIS, last ballot before publication) was 29198 – Characterization and measurement of difficulty for fingerprint databases for technology evaluation
- Moved to CD level: 29197 – Evaluation methodology for environmental influence in biometric system performance, 29120-2 – Machine readable test data: Test input data (4<sup>th</sup> CD), and 4<sup>th</sup> PDTR 29189 – Evaluation of examiner assisted biometric applications
- Continued work on 29156 - Guidance for specifying performance requirements to meet security and usability needs in applications using biometrics, issuing a 5<sup>th</sup> working draft and 2<sup>nd</sup> WD on Amendment 1 to 19795-2: Testing of multi-modal biometric implementations.

**WG6 – Societal Aspects.** WG6 has made tremendous progress over the last couple of meetings. In particular:

- Moving to CD level were a number of projects: 24779, Pictograms, icons and symbols for use with biometric systems, Parts 1-3 (General principles, Fingerprint applications, and Vascular applications, respectively), and PDTR 29144, The use of biometric technology in commercial Identity Management applications and processes
- A first working draft of Part 4 of 24779, Pictograms, icons, and symbols for face applications.
- Remaining at working draft was 29194, TR on Guide on designing accessible and inclusive biometric systems (with a name change)

**Liaison activities.** SC37 interacts with other committees within ISO, and with other external organizations as well, to coordinate efforts related to biometric standardization. In particular, it has close relationships with SC17 (Cards and personal identification) and SC27 (IT security techniques). As a result, special groups within SC37 exist to coordinate the review and comment on each others' projects. For example, SC17 has projects related to on-card biometric comparisons and SC27 has a new work item proposal on identity proofing that is of interest to SC37.

**What's next?** Beginning its new 9 month meeting cycle, the next meeting of the SC37 WGs is scheduled for April 2012 in Winchester, England. At the Paris meeting, it was proposed that a plenary be held every nine months; however, this was deferred to a new special group formed to address strategic issues.

Need more detail on the status of a particular project? Email to [cathy.tilton@daon.com](mailto:cathy.tilton@daon.com).

