

Special Report on the January SC37 Meetings in Toledo, Spain

By: Catherine Tilton

(23 January 2015, Toledo) The Spanish National Standards Body, AENOR, hosted the most recent meetings of ISO/IEC JTC1 SC37 subcommittee on biometrics and its working groups. The meeting location was the city of Toledo, Spain. The first 5 days were filled with meetings of the six working groups comprising the SC, followed by two days of plenary meetings, with a lovely weekend in between for the delegates to either head home or otherwise enjoy. Experts to the working group meetings were treated to a tour of the old Medieval city of Toledo and to a dinner.



What is the difference between an 'expert' and a 'delegate' you may ask? Experts appointed by their country's national body attend working group meetings, where the content of the work items is discussed and agreed. As you might expect, experts bring their personal expertise to bear to review, comment, and contribute to the emerging standards. Delegate is a more formal position – delegates represent their national body positions on work items and the operation of the SC at the plenary meetings where recommendations from the WGs are approved (or not). Mystery solved!

As usual, the meetings were very productive, with many projects progressing to the next level. At this time, SC37 has 54 published standards and technical reports, with 24 in progress (excluding revisions and amendments). Highlights of the Toledo meeting 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! Also, SC37 now has a [Wikipedia page](#) – check it out!

WG1 – Vocabulary. The work of a vocabulary expert is never done as WG1 continues its revision (actually, expansion) of the ISO/IEC 2382-37 Biometrics Vocabulary standard. One area addressed this cycle was terms related to multi-biometrics. WG1 uses the ISO standard process for vocabulary development, creating concept maps and ensuring that terms are harmonized to result in a consistent group of terms and definitions. It also provides historical context for how and why the concepts, terms, and definitions evolved as they did. This project is currently at the 2nd CD stage. The revision of the Biometrics Tutorial technical report, TR 24741, is now in its 3rd working draft, adding material related to privacy and information security.

WG2 – Interfaces. WG2 is in the process of revising TR24722, Multimodal and Multibiometric Fusion, which was originally published in 2007 – a seminal work at the time. Part 1 of both CBEFF (ISO/IEC 19785) and BioAPI (ISO/IEC 19784) are currently in revision, with CBEFF moving to FDIS and BioAPI, along with its conformance standard (24709) remaining at CD. The biometric web services standard, BIAS (Biometric Identity Assurance Services, ISO/IEC 30108-1) also moved to FDIS. Part 3 of CBEFF (19785-3, Patron Formats) will now be revised to match up with the revised base standard. The 3 parts of the Object-Oriented BioAPI standard (ISO/IEC 30106) were not progressed in this cycle.

Since my last report, CBEFF part 2 (Procedures for operating the biometric registration authority) has been withdrawn due to changes in ISO procedures. Did you know that IBIA continues to run this biometric registration authority for ISO? See the [RA website](#). [What is this? The biometric RA is where biometric identifiers are assigned/listed – such as biometric organizations, data format identifiers, algorithm IDs, etc. – to ensure global uniqueness.]

WG3 – Data Formats. XML versions of the dearly loved and highly adopted biometric data formats (ISO/IEC 19794 series) will soon be available at a website near you! Part 1 (Framework) has gone to publication, with other parts soon to follow – look for parts 2 (finger minutiae), 4 (finger image), 7 (signature/sign time series), and 9 (vascular) XML amendments to go to publication by the next meeting with part 6 (iris) also in the works. The possibility of ASN.1 versions (for Gen3) is being discussed with strong feelings both for and against this route. (Recall that parts 13 and 14, voice and DNA, are natively in XML format, with no binary equivalent.) The next step being pursued is to issue consolidated versions of the data format standards which pull all of the amendments and corrigenda into a single document for each part. SC37 is also working with ISO in Geneva to ensure that highly used previous versions remain available (e.g., for ePassports) along with internal discussions about backward compatibility of future versions.

We've reported previously about 'joint projects' that cross WG boundaries, with ISO/IEC 30107 (Presentation attack detection) being a prime example. Another such project, recently approved, is ISO/IEC 30137, Biometrics in video surveillance systems which has parts in WG3 (part 3, data formats), WG4 (part 1, design and specification), and WG5 (part 2, performance testing and reporting). Each part is currently in working draft. With respect to 30107, part 1 (framework) is at DIS, part 2 (data formats) at CD, while part 3 (testing and reporting) is at WD3. An outstanding item related to 30107 is how to link PAD data to biometric data.

In other WG3 news, part 6 of biometric sample quality (iris, 29794-6) has gone to publication, with part 4 (finger image) at CD. Part 15 of 19794 (palm crease data format) is moved to CD as is part 13 (voice), though numerous contributions are solicited on the latter, including for audio encoding schemes. This part continues to lag behind the ANSI/NIST voice format (in progress).

WG4 – Profiles. Using the ISO 'Fast Track' process, CEN TS 16428, Best practices for slap ten print captures, will now be published as ISO/IEC TS 20027 as a biometric interoperability profile. TS designates a 'technical specification' as opposed to an 'international standard' (IS). At the same time, a revision project has been initiated for 20027 during which it will be converted from a TS to an IS.

In addition, 2 technical reports have now gone to publication – TR 29195 (Traveler processes for biometric recognition in automated border control systems) and TR 29196 (Guidance for biometric enrollment). Congratulations WG4!

In other WG4 news, the Code of practice for the implementation of a biometric system (30124) moved to CD and the technical report on biometrics used with mobile devices (30125) to 2nd PDTR. WG4 is also responsible for part 1 of the surveillance project (30137) mentioned above.

WG5 – Performance Testing. WG5 continues its solid work in biometric performance testing and reporting. Since my last report, 2 standards, ISO/IEC 29120-1 (Machine readable test data for biometric testing and reporting - Part 1: Test Reports) and ISO/IEC 29197 (Evaluation methodology for environmental influence in biometric system performance), as well as a technical report, TR 29189

(Evaluation of examiner-assisted biometric applications), have gone to publication. Congrats to all involved!

Work in progress includes a TR on Guidance for specifying performance requirements to meet security and usability needs in applications using biometrics (29156) which entered its 4th PDTR, 30136 on Performance testing of template protection schemes at WD4, and part 2 of the surveillance project. WG5 is also looking into whether a standard related to mobile device biometric performance testing is needed.

WG6 – Societal Aspects. WG6 experts have been busy bees also, establishing 2 new special groups to investigate a) Issues affecting facial recognition and best practices for their mitigation and b) Operational biometric data sharing which will hold initial meetings in April and March respectively.

Since my last report, TR 29194, Guide on the inclusive design and operation of biometric systems, has been sent to publication. Good work WG6!

With regard to their ongoing projects, WG6 progressed a number of projects including to FDIS: parts 1 (General principles) and 9 (Vascular applications) of ISO/IEC 24779 (Pictograms, icons and symbols for use with biometric systems), with part 4 (Fingerprint applications) going to DIS and part 5 (Face applications) entering its 4th WD; and TR 30110, Biometrics and Children, going to PDTR.

Liaisons. At this meeting, new liaisons were established with IEC/SC3 on Graphical Symbols, with JTC1/WG9 on Big Data, with JTC1/WG10 on the Internet of Things, and with JTC1/SC35 on User Interfaces.

Next meeting. Norway will be hosting the next meeting of SC37 WGs in June 2015.

Need more detail on the status of a particular project? Email to cathy.tilton@daon.com.