Special Report on the January SC37 Meetings in Darmstadt, Germany
By: Greg Cannon

(21 January 2014, Darmstadt) The January meetings of the working groups of ISO/IEC JTC1 SC37 subcommittee on biometrics were held in Darmstadt, Germany. This marked the second and last meeting held on the new 9-month meeting cycle; the delegates decided that the 6-month cycle was more productive, and the next meeting will be held in July at Purdue University in the United States. The meetings were hosted by Fraunhofer IGD which provided an excellent venue for the working group and plenary meetings. In addition to the meetings, delegates had the option to attend a post meeting workshop on Biometrics and Forensics hosted by the European Association for Biometrics (EAB) and the Netherlands Forensic Institute.

Highlights of the 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!

WG1 – Vocabulary. WG1 is led by Dr. Peter Waggett of the UK. WG1 established the expected revision project to the ISO/IEC 2382-32 Biometrics Vocabulary standard (just recently published) to allow for the introduction of new terms for presentation attack detection and performance testing. WG1 also took on a new task of revising ISO/IEC Technical Report 24741, Biometrics Tutorial, in which the overview and harmonization document (SD11) will be incorporated, and for which a call for contributions was issued.

WG2 – Interfaces. Led by Dr. Young-Bin Kwon of Korea, WG2 continues to work on the BioAPI and CBEFF family of standards, as well as on the international version of BIAS (Biometric Identity Assurance Services). At this meeting, WG2 decided to start a revision project for CBEFF and BioAPI at the CD stage. WG2 also decided to cancel the project for security mechanisms for embedded BioAPI. Also notably, 19785-3 (CBEFF Patron Formats) and 30108-1 (BIAS services) was moved to DIS ballot.

WG3 – Data Formats. Led by Dr. Christoph Busch of Germany, WG3 continues to work on standardized biometric data formats, including standards for biometric sample quality and liveness and anti-spoofing. Major activities accomplished include progression of our XML encoding amendments, including the xml encoding framework which moved past FDAM. A new work item was approved for the standardization

of palm crease image data, with a new working draft to be circulated. The work on biometric sample quality continues to progress, with major discussion relating to vector quality encoding, gabor filters for fingerprint images and sharpness measurement algorithms for iris. For the 30107 standard of liveness and anti-spoofing (Presentation Attack Detection), WG3 decided to split the project into a framework, a data formats standard, and a testing standard. The framework will be circulated as a CD. Additionally, a significant discussion between WG3 and SC17 occurred to assure that SC37 generation 1 standards would continue to be maintained for passports until 2033, and also to provide guidance towards the development of our 3rd generation of standards.

WG4 – Profiles. Led by Michael Hogan of the US, WG4 is focused on a variety of projects, including mobile biometrics (30125), code of practice for biometric systems (30124), and technical reports for biometric enrollment (29196) and automated border control systems (29195). Notably, the technical reports 29196 and 19195 were circulated as DTR following the Darmstadt meeting. A new project for best practices for 10-print systems was also discussed, and it is expected that the technical report 16428 from CEN TC 224 will be fast-tracked as an ISO technical report. Additionally, a new work item associated with dealing with CCTV systems was discussed, with work expected to be done in working groups 3, 4, and 5.

WG5 – Performance Testing. WG5 is led by Nigel Gordon of the UK. A major aspect of the work performed in Darmstadt was associated with the development of a testing standard for biometric template protection schemes (30136).   The work towards providing guidance towards the specification of performance requirements for biometric systems moved to a 7th working draft (29156). The 29197 standard dealing with environmental influences on biometric system performance moved to a 2nd DIS, as did the 29120-1 standard for machine readable test formats. The 19795-2 standard for testing multimodal implementations went to DAM circulation.

WG6 – Societal Aspects. Dr. Mario Savastano of Italy leads the WG6 group. The group worked towards the development of a TR for dealing with the impact of biometrics on children (30110). Another significant area of work involves the standardization of icons and pictograms for biometric systems, including a framework FDIS (24779-1), fingerprint DIS (24779-4), face WD (24779-5) and vascular FDIS (24779-9). WG6 also sent to publication TR 29194 related to the use of biometric technology in commercial identity management applications.

Plenary. Fernando Podio is the chair of SC37, and Lisa Rajchel of ANSI is our Secretariat. Together, they lead the plenary meeting. At the plenary, we went through all the proposed resolutions from the working group meetings and approved them. Additionally, we went over some clarifications from JTC1 that allows experts to be able to directly contribute to standards at the working draft level. This is expected to have a minor impact on how the working groups and editors resolve comments, as it allows more freedom at early stages of standards development.

Next meeting. Purdue University, in Lafayette, Indiana, USA is the location of the next SC37 plenary and WG meeting scheduled for July 2014.

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

About Our Guest Reporter – Greg Cannon

Greg Cannon is Senior Vice President, Architecture and Standards responsible for the Company's standards involvement, intellectual property, software architecture, biometric algorithm development, and continued innovation excellence. Greg serves as the US head of delegation to ISO/IEC JTC1 SC37 WG3.

Mr. Cannon joined Cross Match in 2001, bringing more than 18 years of technical expertise and product development experience. Previously he held product and application development management positions with Motorola and 3Com. Mr. Cannon's principal area of expertise is the development of high performance signal and image processing capabilities, specializing in sampling theory, biometrics, decision theory, and pattern recognition.

Mr. Cannon has over 40 patents and several papers to his credit. He holds a Bachelor of Science in Electrical and Computer Engineering from the University of Texas, Austin, and a Masters of Electrical Engineering from the University of Texas, Arlington.