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INCITS M1 – Standing Document 5 (SD5)

Common Text for Inclusion in the Introductory Clauses of INCITS M1 Ongoing Projects in INCITS M1.2, M1.3 and M1.4

*The following text extracted from **M1/06-0683** was approved by the INCITS M1 at its 27 October 2006 meeting. See table of ongoing projects*

This standard is one of a family of American National Standards being developed by INCITS that support interoperability and data interchange among biometrics applications and systems. This family of standards specifies requirements that solve the complexities of applying biometrics to a wide variety of personal recognition applications, whether such applications operate in an open systems environment or consist of a single, closed system. Open systems are built on standards based, publicly defined data formats, interfaces, and protocols to facilitate data interchange and interoperability with other systems, which may include components of different design or manufacture. A closed system may also be built on publicly defined standards, and may include components of different design or manufacture, but inherently has no requirement for data interchange and interoperability with any other system.

Biometric data interchange format standards and biometric interface standards are both necessary to achieve full data interchange and interoperability for biometric recognition in an open systems environment. The INCITS biometric standards family includes a layered set of standards consisting of biometric data interchange formats and biometric interfaces, as well as application profiles that describe the use of these standards in specific application areas.

The biometric data interchange format standards specify biometric data interchange records for different biometric modalities. Parties that *agree in advance* to exchange biometric data interchange records as specified in a subset of the INCITS biometric data interchange format standards should be able to perform biometric recognition with each other's data. Parties should also be able to perform biometric recognition *even without advance agreement* on the specific biometric data interchange format standards to be used, provided they have built their systems on the layered INCITS family of biometric standards.

The biometric interface standards include the Common Biometric Exchange Formats Framework (CBEFF) and the Biometric Application Programming Interface (BioAPI).

These standards support exchange of biometric data within a system or among systems. The CBEFF standard specifies the basic structure of a standardized Biometric Information Record (BIR) which includes the biometric data interchange record with added metadata, such as when it was captured, its expiry date, whether it is encrypted, etc. The BioAPI standard specifies an open system API that supports communications between software applications and underlying biometric technology services. BioAPI also specifies a CBEFF BIR format for the storage and transmission of BioAPI-produced data.

The biometric application profile standards facilitate implementations of the base standards (e.g., the INCITS biometric data interchange format and biometric interface standards, and possibly non-biometric standards). These profile standards define the functions of an application (e.g., Biometrics-Based Verification and Identification of Transportation Workers, Biometric-Based Personal Identification for Border Management, Point-of-Sale Biometric-Based Verification and Identification) and then specify use of options in the base standards to ensure biometric interoperability.