

M1/03-0566

Biometric Security Card, Inc. (BSC) response to the M1.1 October 9, 2003 responses to our public review comments on INCITS 377, finger pattern data interchange format

X-Sieve: CMU Sieve 2.2
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Cc: "Creed Jones" <crjones4@vt.edu>
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responses to our public review comments on INCITS 377, finger pattern data interchange format

Dear Mr. Podio,

I have reviewed the above referenced M1.1 response. BSC is not satisfied with the response.

The proposed INCITS 377 standard requires that all fingerprint images be re-sampled to a 200 ppi, 70 x 80 pixel array; coded as a cell structure; and stored in a standard data interchange format. Following the data interchange, the receiving biometric verification algorithm is responsible for decoding the cell structure, and re-sampling the image to reconstruct the original resolution.

Based upon our experience, reconstruction methods such as the one being proposed will result in a significant loss of image resolution. In a interoperable environment, the loss of image resolution will place the majority of the finger pattern biometric algorithm vendors at a competitive disadvantage since there solution will not perform well.

The proposed data interchange format solution may be very effective method for a few vendor products but since each pattern based biometric algorithm is very unique, the proposal is not an effective method for most vendors to use. The majority of the finger pattern algorithms require good resolution images (better than 200ppi) to achieve accurate verification. Prior to two years ago, finger sensor solutions were not viable because the sensors were not creating images with adequate resolution. Now that sensors which create good resolution image are available, the INCITS 377 standard appears to be offering a solution that is taking the industry a step backwards. The resolution improvement of finger images will continue to be

the key ingredient that will allow better and more efficient finger pattern algorithms to be developed in the future.

If M1.1 chooses to proceed with this proposed standard, I recommend that prior to finalizing the standard, a testing period be scheduled to allow all finger pattern algorithm vendors to determine the technical viability of the standard being proposed.

Sincerely,

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