A short history of the "Biometric Consortium" - an NSA led Incubator Project from 1992 to our times

Featuring: The genesis of Europe's biometric passports.

Research by q/pis - the quintessenz public intelligence service.

Editor's note: This is the draft version covering currently the periods 1992 to Oct. 1994 and Oct 1994 to December 1996. The periods 1997-1998, 1999 -11. Sept. 2001, Sept 2001- until today will be published subsequently at

http://quintessenz.org/datamining_the_nsa

1. Pre-Historic years 1992 - 1994

There are not many details known yet about the earliest history of the Biometric Consortium that was called "Biometric Authentification Consortium" at that time. The BAC-Group originally consisted of roughly 50 persons from military and governement institutions only. The effort was kicked off and led by half a dozen persons at the North Carolina Supercomputing Center.

"The BC was established in 1992 as a "US government only" interest group in biometrics. The purpose was to share information on biometrics, not to advocate for the technology or for particular political points of view. At first, there were 2 :government-only meetings a year. In 1994, the BC began to allow government contractors to attend BC meetings and the listserve was established." [Dr. James L. Wayman on 2004_02_04 to the BC-list]

From the official Biography of of the Biometric Consortium's first chairman:

"From 1979 to 1990, Dr. Campbell was a member of NSA's Narrowband Secure Voice Technology research group. Joe and his teammates developed the first DSP-chip software modem and LPC-10e, which enhanced the Federal Standard 1015 voice coder and improved US and NATO secure voice systems. He was the Principal Investigator and led the US Government's speech coding team in developing the CELP voice coder, which became Federal Standard 1016 and is the foundation of digital cellular and voice over the Internet telephony systems. From 1991 to 1998, Dr. Campbell was a senior scientist in NSA's Biometric Technology research group, where he led voice verification research."

1.2 Concurring events of significance 1992-1994

- 1993 Biometric company American Morpho Systems, a contractor to the FBI, was taken over by state owned French army contractor SAGEM. Morpho had been a contractor to the FBI, offering the most-advanced algorithms to read in fingerprints at that timer. SAGEM Morpho was to become the world market leader in fingerprint systems.

"The company was founded in the United States in 1985 as a subsidiary of French fingerprint systems developer Morpho Systèmes, S.A. In March 1993 the SAGEM Group of Paris, France purchased both North American Morpho and MORPHO Systèmes, S.A. The SAGEM Group is an internationally recognized, broad-based technology supplier of telecommunications, electronics, and defense systems. Reflecting our growing relationship with our parent company, North American MORPHO Systems, Inc. became SAGEM Morpho, Inc. on January 1, 1998.

1993 - "Although inherently a secret business, a public museum devoted to the history of cryptologists and their work opened to the public in December 1993. Memorabilia ranging from the German Enigma to the recently declassified Cray computer decorate the museum hallways." [Official text from the NSA website]

1993 - "IriScan, Inc. begins business operations and is awarded a cost-plus fixed fee R&D contract by the Defense Nuclear Agency to develop, test and deliver a prototype unit. Unit based on the combined efforts of Drs. Flom, Safir and Daugman delivered on time, below cost and in compliance with all contract requirements eighteen months later in 1995."

- 1994 - A patent is awarded for the Daugman iris recognition algorithms. This basic patent to read in iris patterns has been owned by a British citizen until its expiration in 2005. This patent on iris recognition is basic to any application working with iris data.

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2. The early years - October 1994 to Dec. 1996

The core group of about 50 members led by the NSA quickly grew to a few hundred during the first two years. After an unspectular start the process of introducing biometrics into government processes first and later society as a whole.
By the last months of 1996 first signs of a development similar to that in the IT/internet sector: a bubble beginning to build up.
A very limited number of contractors has been on the BC-List since the very beginnings. John Siedlarz, then CEO of Iriscan was one of them, as Irisscan supplied Defense Nuclear Agency with an iris recognition system as early as 1994. Siedlarz later became the head of the National Biometric Security Center [NBSC], a non-profit lobby-group, that has been active..

2.1 Main events on the List in that period

1994_10_03 The list was started in a technical sense on Oct 3 1994. Home was on majordomo@super.org, owned by the Center for Computing Sciences 7100 Science Drive, Bowie, Maryland.

1994_10_21 The first posting of significance was on Fri Oct 21 1994 by jpcampb@alpha.ncsc.mil (Joseph P Campbell) "There are 55 people on the list"

1994_10_05 Meeting of the BAC [Biometric Authentication Consortium] on 25 October 94 in Monterey.

1995_01_16 NIST offers 18 different databases and software from the Visual Image Processing Group ranging from "Mugshot Identification" to "8-Bit Gray Scale Images of Mated Fingerprint Cards". Whereas the OCR -> NIST FORM-BASED HANDPRINT RECOGNITION SYSTEM was in the public Domain the price range of all other databases was between 250 and 1.150 USD.

1995_3_22 Biometrics Consortium and the FBI organized the 7th meeting of the Biometric Consortium on March 21-22, 1995 at the FBI's facility in Quantico, VA. Unlike earlier meetings this one was not classified snad therefore no clearance for patrticipants was necessary. By that time British and Canadian government agencies come in.

1995_3_28 By March 1995 the British National Physical Laboratory [NPL] can be spotted for the first time on BC-list. Mission was "developing a proposal to establish biometric testing services in Europe, as part of the European Commission Framework IV project".

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1995_04_01 There were five working groups active, members were invited to "co-chair" a group to coordinate and give presentations at BC meetings. Groups are: Testing and reporting [10 members], vulnerability group [Information "intentionally omitted"] a database group [four persons] a "ground rules committe" [six] and "a research and technologies group" [14 persons]. Names of group chairs are omitted, as well as the members of the "vulnerability" group. As the list of names does not contain any of the identified NSA staff on BC-list there is reason to believe that the NSA staff presided the groups and dominated the vulnerabiltygroup.

1995_04_08 According to a posting the Biometrics Industry Standards Association [BISA] held one of their first meetings in Washington DC.

1995_06_17 Release of the BC mission by NCSC's Lisa Alyea and Joseph B. Campbell: Top on priority was to "combine funds for ... the establishment of a national test center." Testing methods for biometric devices should "become at least Government, and hopefully, national/international standards." The BC is "presently comprised of representatives from 6 departments of the US Government and the armed services" ...represented by approximately 100 individuals."

1996_03_18 The BC-list has over 160 subscribers. This list
is providing rapid dissemination of information and enabling discussion
among our members and guests. Subscription is doen by emailing Joe Campbell. The NCSC (National Computer Security Center) even started to offer dial-up internet accounts throughout most of the U.S. via the Tymnet network.

1996_05_16 The CardTech/SecurTech conference opened with a keynote by Alvin Toffl in Atlanta, Georgia.

338 exhibit booths, 6000 attendants. 150 Speakers in 22 seminar tracks. Biometrics on display were: 7 fingerprint, 2 eye, 2 hand, 2 voice, 3 signature, 2 face.

1996_06_12 The Eighth Biometric Consortium Meeting is held at the San Jose State University [SJSU]

1996_07_20 S According to chairman Joe Campbell "the mail server on ALPHA is sick"

1996_07_31 The National Computer Security Association [NCSA] announces the formation of the Commercial Biometrics Development Consortium [CBDC]. The CBDC will work in cooperation with Len Natkin, founder of the BiSA, and with Dr. Joe Campbell of the Biometric Consortium. Natkin was proposed technical advisor to the CBDC during its start-up phase. Proposed were quarterly meetings.

1996_08_15 The Connecticut Department of Social Services along with several other states and provinces formed The Biometrics in Human Services User Group [BHSUG] open to all state, federal, provincial, educational or other governmental organizations

1996_09_08 First meeting of the Commercial Biometric Developer Consortium (CBDC)at the Renaissance Atlanta Hotel. Amongst the "usual suspects" of the upcoming biometric industry Andersen Consulting and Walt Diseny World participated as well. The latter company planned to introduce an entrance and billing system based on biometrics.

1996_10_02 The second meeting of the speaker verification API standards group (SVAPI) was held in Landover, Maryland on October 2nd "at a secure site" writes Judith A. Markowitz [@lulu.acns.nwu.edu]. "We will be discussing major issues related to creating an API standard and will be formalizing the structure of the group."

1996_10_30 At CardTech/SecurTech '96 on "Government Applications in Action" are shown at the Hyatt Regency in Arlington, Virginia. ID-Cards and related applications "standards, implementation strategies, card and technology migration, secure software, costs/benefits, key management Smart Cards. As wellas Automated Client ID Systems: "fingerprints, digital photos, digital signatures, and facial recognition in state assistance programs" Over 35 presentations from industry and government were held: Advanced Precision (finger), FingerMatrix, ID Tech. Intern'l (Face), Identicator (finger), IriScan, Logica (finger), Miros (Face), PrintScan, TMS (Finger), Iltra-Scan (Finger), Viisage (Face), and a few others. Amongst the participants was a large number of state bureaucracy , the Biometric Consortium and the DoD.

1996_11_26 The Biometrics In Human Services User Group Newsletter (Second Issue) becomes available at the CT Digital Imaging Website. Included a detailed account about Massachusetts MDTA's unique combination facial and finger imaging project. New York's plans to pilot finger imaging at ATM's with Citibank. http://www.dss.state.ct.us/digital.htm

1996_12_04 SV API standards meeting of the speaker verification API standards committee was scheduled for December 4 in Chicago. Possibly hosted by a company named "Dialogic"

1996_12_09 The NCSA holds the 2nd quarterly meeting of the CBDC consortium in San Jose, Ca., Monday, in San Jose, CA.

1996_12_07 "The problem with our listserv has been fixed, thus ending the 2-month "bio-digest" was announced by the chairman who had "been unable to make any subscription changes" for two months.

1996_12_07 New on the BC web site were papers from the CardTech/SecurTech Govt conference and a concept of operations for AFIS systems, new pages from Cogent, NEC, Recognition Systems, IriScan, and Veincheck. Visionics' announcement of FaceIt PC Access taht could be purchased for $60 on the web. NRI's new compact low-cost fingertip scanner and Sony's entry into the fingerprint market. http://www.biometrics.org:8080/~BC/>

2.2 Concurring events of significance Oct. 1994-1996

1996_06_21 Like the NSA the Defense Information Systems Agency <spd@ncr.disa.mil> goes [semi]-public: The "Center for Information Systems Security [CISS] sporting a "Security Products Database" (SPD). New hardware software and tools should be handed in by the vendors, being evaluated then by DISA. The results should be open to the DOD community, other Government Agencies in the U.S. and overseas free of charge. All information provided on the products must be unclassified "so the SPD can continue to be provided to everyone".

1996 The European Unions DG13 framework 4 provided 100 million ECUs per annum for collaborative EU technology initiatives. One of those projects was a veincheck biometric system based on the detection and pattern comparison of subcutaneous blood vessels. In near Term [1-2 years] this should offer physical access control like intelligent door handles. Testing was arranged in major European Financial Institutions.

1996 "A demonstration Model for an open Infrastructure Chipcard is nearing completion in the Netherlands.The Nationaal Chipcard Platform (NCP) consortium planned to store the details with biometric data, such as fingerprint [possibly Identix] and signature verification data [Countermatch] on the card and related administrative system. Card holders will then be able to identify themselves with the same card, via standard readers, to all systems [libraries, banks, insurance companies, theaters, municipal authorities and on public transport] holding their personal and biometric information. The card itself would include information on the options it offers that could be displayed on the screen of any standard reader.