

Definitions for NTIA Privacy Multistakeholder Facial Recognition

Draft – July 21 - 2014

Algorithm

A limited sequence of instructions or steps that directs a computer system how to solve a particular problem or perform a function.¹

Custodian

The entity or individual that holds Facial Recognition Data

Database

The facial recognition system's database or set of known subjects. May include Facial Templates.

Delete

To make unreadable Facial Recognition Data so that after deletion it cannot be used by reasonable means.²

OR

To remove (something, such as words, pictures, or computer files) from a document, recording, computer, etc.³

Encryption

The protection of data using reasonable means that have been generally accepted by experts in the field of information security, which renders such data unintelligible or unreadable.

Enroll

The process of storing and maintaining Facial Recognition Data.

Entity using Facial Recognition

An entity that uses Facial Recognition Systems to Collect and/or Use Facial Recognition Data about Subjects.

¹ National Science & Technology Council's Subcommittee on Biometrics - *Biometrics Glossary* definition of "Algorithm": "A limited sequence of instructions or steps that tells a computer system how to solve a particular problem. A biometric system will have multiple algorithms, for example: image processing, template generation, comparisons, etc."

² Based on National Science & Technology Council's Subcommittee on Biometrics - *Biometrics Glossary* definition of "Identification": "A task where the biometric system searches a database for a reference matching a submitted biometric sample, and if found, returns a corresponding identity. A biometric is collected and compared to all the references in a database. Identification is "closed-set" if the person is known to exist in the database. In "open-set" identification, sometimes referred to as a "watchlist," the person is not guaranteed to exist in the database. The system must determine whether the person is in the database, then return the identity."

³ Merriam Webster definition of "delete": "to remove (something, such as words, pictures, or computer files) from a document, recording, computer, etc."

Existing Privacy Laws and Regulations:

Any state or federal law or regulation that governs the collection or use of personal data from a Subject, where Facial Recognition Data could be considered one type of such data. These laws and regulations may include, but are not limited to, the Gramm-Leach-Bliley Act, the Health Insurance Portability and Accountability Act, the Children's Online Privacy Protection, the California Online Privacy Protection Act, the Electronic Communications Privacy Act, Section 5 of the Federal Trade Commission Act, and state UDAP ("Unfair or Deceptive Acts or Practices") laws.

Facial Authentication

A task where the Facial Recognition System attempts to confirm an individual's claimed identity by comparing the template generated from a submitted face image with a specific known template generated from a previously enrolled face image. This process is also called one-to-one verification.⁴

Facial Detection

A task where the Facial Recognition System distinguishes the presence of a human face and/or facial characteristics without necessarily creating or deriving a Facial Template.⁵

Facial Detection Software

Software used to detect the presence of a human face.⁶

Facial Identification

Searching a database for a reference matching a submitted Facial Template and returning a corresponding identity.⁷

Facial Recognition Data:

Data derived from the application of Facial Recognition Software, including Facial Template and associated metadata.

Facial Recognition Software:

Software used to compare the visible physical structure of an individual's face with a stored Facial Template.⁸

⁴ Definition based on comments from Walter Hamilton and John Dowden.

⁵ Change based on definition of Facial Profiling created and submitted by Ariel Johnson and the FTC's report refers in the Case Study section to "the detection or recognition of demographic characteristics" (p. 13)

⁶ Definition based on comments from stakeholders during May 20, 2014 meeting.

⁷ Based on National Science & Technology Council's Subcommittee on Biometrics - *Biometrics Glossary* definition of "Identification" and "Detection Rate": "The rate at which individuals, who are in a database, are properly identified in an open-set identification (watchlist) application. See also *open-set identification, watchlist.*"

⁹ Based on National Science & Technology Council's Subcommittee on Biometrics - *Biometrics Glossary* definition of "Template": "a digital representation of an individual's distinct characteristics, representing information extracted from a biometric sample. Templates are used during biometric authentication as the basis for comparison. See also *extraction, feature, model.*"

Facial Recognition System:

A system that uses Facial Recognition Software.

Facial Template:

A digital representation of distinct characteristics of a Subject's face, representing information extracted from a photograph using a facial recognition algorithm.⁹

Facial Image:

A photograph or video frame or other image that shows the visible physical structure of an individual's face

Operation of Facial Detection Software:

Facial Detection Software is considered "in operation" when the process of Facial Detection is occurring.

Secure Storage of Information

Using commercially reasonable measures to secure information.¹⁰

Share Information

The disclosure of information to an entity other than the Entity using Facial Recognition or Subject.

Subject:

The individual represented in a Facial Recognition System and/or a facial recognition database.¹¹

Threshold:

A user setting for Facial Recognition Systems for authentication, verification or identification. The acceptance or rejection of a Facial Template match is dependent on the match score falling above or below the threshold. The threshold is adjustable within the Facial Recognition System.¹²

⁹ Based on National Science & Technology Council's Subcommittee on Biometrics - *Biometrics Glossary* definition of "Template": "a digital representation of an individual's distinct characteristics, representing information extracted from a biometric sample. Templates are used during biometric authentication as the basis for comparison. *See also extraction, feature, model.*"

¹⁰ Based, in part, Article 4A-202 of the Uniform Commercial Code (the "UCC") requirements for bank transfers: "If a bank and its customer have agreed that the authenticity of payment orders . . . will be verified pursuant to a security procedure, a payment order . . . is effective as the order of the customer . . . if: (a) The *security procedure is a commercially reasonable method* of providing security against unauthorized payment orders;"

¹¹ Based on the National Science & Technology Council's Subcommittee on Biometrics - *Biometrics Glossary* definition of "User": "A person, such as an administrator, who interacts with or controls end users' interactions with a biometric system. *See also cooperative user, end user, indifferent user, non-cooperative user, uncooperative user*" However, separated out to clarify the subject and the user are different.

¹² Based on National Science & Technology Council's Subcommittee on Biometrics - *Biometrics Glossary* definition of "Threshold": "A user setting for biometric systems operating in the verification or open-set identification

(watchlist) tasks. The acceptance or rejection of biometric data is dependent on the match score falling above or below the threshold. The threshold is adjustable so that the biometric system can be more or less strict, depending on the requirements of any given biometric application. *See also comparison, match, matching.*"