



J13 Electronic Signatures: What Are They, What Do We Know About Them, and What Do I Do When an Electronic Signature Case Lands on My Desk?

Kathleen Annunziata Nicolaidis, BA, Associated Forensic Laboratory, LLC, Phoenix, AZ 85013*

Learning Overview: After attending this presentation, attendees will be more knowledgeable on research conducted in this field, the different types of electronic signatures, and what to do when contacted about an electronic signature case.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by educating forensic document examiners about electronic signatures, what questions to ask submitters of electronic signature cases, and what tools are available for working these types of cases.

More and more, our signatures are being collected electronically. We are signing with our fingertips on phones or tablets, with a stylus on a signature pad, or by simply clicking a mouse button. Forensic document examiners around the world are encountering questions and cases involving electronic signatures. Attendees will learn about the different types of electronic signatures, research conducted in the field, and what to do when contacted about an electronic signature case. Results of a survey will be shared that will assess the prevalence of electronic signature cases around the world.

Although the United States Congress passed the Electronic Signatures in Global and National Commerce Act (ESIGN) in 2000, confusion remains about electronic signatures over two decades later. There are different types of electronic signatures, a multitude of vendors supplying software and hardware to businesses and governments incorporating electronic signatures into their workflow, and various regulations regarding their implementation. For instance, internet research unearthed a website providing Frequently Asked questions (FAQs) on electronic signature compliance with the Federal Drug Administration (FDA).¹ Below are just a few of the questions answered on the site:

- What methods may be used to create valid electronic signatures? **There are no mandated methods and part 11 regulations permit a wide variety of methods (from 2017).**¹
- Does signing a true signature on a tablet comply with regulations? **It can. The basic approach of linking a subject-applied signature to an electronic consent form using a computer tablet's stylus feature can be considered part 11 compliant if consistently used correctly as intended (from 2014).**¹
- What requirements must electronic signatures based on biometrics meet to be considered an accepted biometric method? **Electronic signatures based on biometrics must be designed to ensure that they cannot be used by anyone other than their genuine owners. They are accepted as long as they meet the requirements in part 11 (from 2017).**¹
- Can an image copy of a signature be used instead of hand signing documents? **No. This is not considered an eSignature, and it provides no measure of security or assurance that the signatory actually drafted/reviewed/approved the document (from 2012).**¹
- Is it an acceptable approach for a user to sign in to a secure data management system with their ID and password, and then only require the password to execute eSignatures during that log-in session? **Yes, this should be Part 11 compliant (from 2013).**¹

The summaries presented in this library are for informational purposes only, they are not for implementation in operations. Please consult official Food and Drug Administration (FDA) guidance documents for operational use.

Forensic document examiners should not only be aware of the different types of electronic signatures, but also of the research conducted to determine if authorship of electronic signatures can be determined. An outline of research conducted both in the United States and abroad will be presented. Finally, discussion will be presented on the questions to ask of persons submitting electronic signature cases, the evidence needed, and the tools available to conduct the exam. Results of a survey will be presented discussing the prevalence of electronic signature cases around the world.

Reference(s):

- ¹. <https://florencehc.com/library-fda-esource-eregulatory-guidance/signatures/>. Accessed 10/22/20.

Electronic Signatures, Casework, Questioned Documents