Outline of Argument

Outline for Essay on the **Electronic Signatures in Global and National Commerce Act**

This paper will describe the factors that led to the enactment of E-Sign and will carefully address the wisdom of a technology neutral approach to electronic signatures. More specifically, this paper will attempt to demonstrate that technology-neutrality can have potentially disastrous effects on the user of an electronic signature since the legislation will permit unsafe transactions to take place while not explicitly stating who will shoulder the risk in the event that an electronic signature is stolen or placed in the wrong hands. In turn, I will analyze the most commonly discussed alternatives to technology neutrality, namely, technology-specific legislation and a regulatory scheme similar to the one that exist between credit card holders and credit card companies.

In assessing various methods to allocate risk, I will show that none of the various consumer protection schemes properly shield the consumer from liability in the event of theft or other non-negligent acts. To this end, I will also address consumer-related issues such as: what happens if the electronic signator does not realize that he has entered into a contract, and who will be liable in the event that an individual’s signature is stolen or intercepted (the CA will most likely bear the risk although they could contract with the signator to allocate the risk differently). Ultimately, I hope to provide some clarity as to whether it is proper to permit an e-mail to create a binding contract in an environment where it is easy for hackers to steal signatures and difficult to objectively prove the (in)validity of an appropriated signature.
I. Background

A. The Formation of E-Sign
Introduction of the importance of electronic signature law in the expansion of electronic commerce. Description of state-sponsored legislation and comparison to the objectives of the federal statute.

B. Major Issues
Pinpoint key issues related to E-Sign and the debates that have surrounded them.

1. Differences Between UETA and E-Sign
Summarize key differences between the two including UETA provisions that allow electronic signatures to be used for evidentiary purposes and E-Sign’s exclusion of specific utilities from falling under E-Sign.

2. Preemption
Describe how E-Sign preempts almost all states (with exception to consumer provisions) that do not adopt UETA and explain the debate over whether it is appropriate for the federal government to do so.

3. Consumer Protections
Discussion of the many consumer protections that are provided for in E-Sign. Explain how click-through shopping will be affected by the law. Present critiques of E-Sign in failing to adequately protect the consumer.

4. Technology Neutrality
Present E-Sign’s approach to technology neutrality and compare to other state and international laws. Create the architecture for the debate as to whether technology-neutrality is a good thing.

II. Variety and Gradations of Electronic Signatures
Summarize the variety of devices that will constitute an electronic signature. Provide a description of the usefulness of different methods. See Adam White Scoville, Clear Signatures, Obscure Signs, 17 CARDOZO ARTS & ENT. LJ 345 (1999).

A. Shared Secrets Method
Examples include personal identification numbers, credit card numbers, and passwords. They provide the minimum level of security and authenticity of signature or record.

B. Biometric Means of Identification
Examples include fingerprints, retinal patterns, face scans, and voice recognition.

C. Digital Signatures
Best example is the Public Key Infrastructure that includes the use of certification authorities. This method provides the best assurance that the electronic record was signed by the party whose digital signature is attached and the electronic contract was not altered after it was signed.

III. Analysis: Spreading Risk Among Consumers and Distributors

A. Technology Neutrality
Evaluate E-Signs’ promotion of technology neutrality. Argue that this proposal, more than any other, is most likely to shift an inordinate amount of risk on the individual providing the signature. Show how the open-ended nature can result in accidentally entering into a contract and that it might be against public policy to permit large transactions to be conducted through technologically inferior means. Demonstrate inadequacies of tort law to cover all possible situations.

B. Technology Specific
Acknowledge the danger in being tied into technology that might become obsolete. Explain that, depending on the technology selected, risk can be evenly or it can be disproportionately spread. Describe biometrics in maintaining the ceremony of contract formation. Illustrate how risk will probably be shifted towards the signator although the likelihood of fraud may be small. Focus on the merits of certain closed and open PKI and CA schemes in protecting the electronic signator and the recipient. Present PKI as a potentially effective way of dealing with fraud, security breaches and ensuring that the parties are aware that a contract has been formed.

C. Credit Card Model
Provide overview of how the credit card industry developed in the 1920s into the industry that it is today. Show that the $50 cap has been in the best interests of the consumer, banks and credit card companies. Explain the model’s applicability to electronic signatures. Note that unless this model is coupled with something that is technology-specific this model will not work since it is premised on the fact that there is a modicum of uniformity in credit cards/electronic signatures and that risk can therefore be calculated.

IV Conclusion