

# *The Future of Money*

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Mr. Chairman, and Members of the Subcommittee, I would like to thank you for inviting me to testify with respect to some of the international implications of electronic commerce and currency, the prospects for transnational industry self-regulation and the importance of commercial law to facilitating the evolution of the new payment technologies. It is vital to the development of a global electronic marketplace for commerce, and for consumers, that these issues be considered with the pro-active leadership which these hearings represent.

## **The Misnomer of Electronic Cash**

Allow me to offer the proposition, articulated with clarity by Joel Kurtzman in *The Death of Money*, (1) that the electronic networks and computers which are the infrastructure for the current global financial community have been instrumental in the decline of national control over money. Indeed, Professor Kazuaki Sono (who formerly chaired the United Nations' effort to define a legal framework for global electronic funds transfers) observed in 1995 that the traditional role of money as a measure of value has been lost at the global scale. (2) The Bretton Woods agreement in 1944 sustained monetary stability for nearly 30 years by assuring that the value of national currencies was related to the scarcity of the resource; only in that manner could the national notes used as legal tender be meaningful obligations of the issuing governments. Of course, while Bretton Woods remained effective, the U.S. dollar was the controlling measure of value for any national currency, linked to the fixed exchange rate of \$35 dollars per ounce of gold.

In 1971, President Nixon's determination to terminate the fixed exchange rate was the first step in a series of developments that set the stage for the introduction into commerce of the new payment mechanisms represented by the companies whose executives join me today in testifying. Indeed, President Nixon's announcement; the development of a floating exchange rate system; the emergence of electronic funds transfers; and the maturation of network-based global markets for financial arbitrage, derivatives and hedges is a compelling sequence of steps toward the evolution of a different notion for defining value. Today, even in the absence of the new payment mechanisms, we tolerate and sustain daily global speculation in trying to determine the value of money. The U.S. dollar, and perhaps any national currency that is the subject of foreign exchange, has become a volatile, mercurial and wholly electronic instrument. (3)

For the consumer, the declining meaning of national currencies as a measure of value has been reflected by the emergence, without any significant social upheaval, of a new payment mechanism. We have been willing to change what we offer in satisfaction of the payment obligation that is part of every purchase contract. We used to believe, with legal tender in hand, that a payment obligation could only be satisfied with U.S. dollars.

However, today, whether by letter of credit, check, by telephone, through Checkfree, or with our debit cards, we now offer to satisfy the payment obligation of the buyer not with money but with the transfer to the seller of the legal obligation of a buyer's bank to pay cash from the account of the buyer to the order of the seller. Thus, it is the good credit of the issuer of the check or the card which is tendered, not legal tender, which is the mechanism of payment. This is a vital development which is a precursor to how we consider putting in place the requisite legal structures for the new payment mechanisms.

Recently, the American Bar Association Section of Business Law Task Force on Stored Value Cards has undertaken to prepare an analysis of the commercial law issues associated with stored value cards and e-cash. (4) Their study of the commercial legal environment emphasizes that the new technology-based payment mechanisms, many of which have been introduced to this Subcommittee today, are indeed quite consistent with the long tradition of substituting for legal tender the transfer of the legal obligation of another to make payment. Indeed, examining the legal concept of payment, the Task Force has emphasized that satisfying the payment obligation with such mechanisms does not involve "money", as such term is defined under the Uniform Commercial Code--the new products are not "a medium of exchange authorized or adopted by a domestic or foreign government. (5) Consistent with Federal law, since such products are not United States coins or currency, they are also not legal tender. (6)

Thus, in considering new electronic payment mechanisms, we are reminded that, for deliberating upon the future of money, there are important attributes in the definitions of "money" and "legal tender" which are absent from these products. Moreover, in the United States, as the Task Force's draft report concludes, the commercial viability of the current payment systems in which bank credits are transferred in satisfaction of the payment obligation finds its strength within a mature, comprehensive private system of rules, relationships and contract structures among financial institutions, their customers and their networks (such as NACHA). These systems, and the payment obligations of each transaction, are a) underwritten by an environment in which the bank credits, measured in national currency, are themselves insured and regulated by the Federal government and b) confirmed by the adoption in the early 1990s of Article 4A of the Uniform Commercial Code.

Such is clearly not the case with the new payment mechanisms. For the consumer, critical and significant questions exist. What now appears clear is that the use of these mechanisms in attempting to discharge a payment obligation with stored value or some form of electronic cash is no different than the earliest occasions on which bank credits were offered as payment--i.e., it is the credit of the issuer of the mechanism that is tendered to discharge the payment obligation. And, in that respect, the situation is no different than when the railroads and banks of this nation issued and circulated their own private notes as payment mechanisms--their value in the market is solely a function of the creditworthiness of the issuer.

It is possible, of course, for transactions to result in the buyer's debt being discharged. Since they are not money nor legal tender, perhaps the best future for these new payment products is to consider them as possible "currency". By definition, "currency" may be any medium of exchange that is passed through a series of continuous transactions. The question to analyze, not a new issue in history, is the role of government in regulating the emergence of new "currencies" seeking to earn a place in the market.

I would submit, as with the existing non-money payment mechanisms, the suitability of a new "currency" for discharging the debt obligation in connection with a sale of goods or services will be measured by the same standards of the present market. Success will be a function of the degree to which a connected network of commercial arrangements have been developed defining the method of discharge, the recourse if the

discharge proves to be rejected by an issuer and a means, perhaps, for verifying the credit availability of the party tendering the payment. Those types of contracts and relationships find their foundation in the fabric of commercial law. As well, and perhaps more importantly to their success, the surviving new "currencies" must be accompanied by the evolution of well-recognized commercial practices that provide a framework for their scalability into the global marketplace.

Here, then, is a differing, perhaps more sobering perspective on these new payment mechanisms, particularly with a view toward their utility in facilitating international trade transactions, including those by consumers:

- The new stored value and electronic cash products are not money and they do not represent the use of legal tender.
  - Absent a change in Federal law, no seller is required to accept these products as discharge of the payment obligation.
  - The new cashless products lack the attributes of creditworthiness or predictable value with which a true substitute for money might find its measure.
- The products offer no fundamentally innovative element--they merely provide a different non-money means of discharging a payment obligation; they lack the complex, integrated systems of rules, underwriting and means of calculating finality of payment that are essential to the evolution of a meaningful alternative to the use of legal tender for payment.
- The products, though technologically innovative, are radically inconsistent in the manner in which they have anticipated the realities of how payment obligations are considered under commercial law. Survival in the market will be largely determined by their responsiveness to the need to be linked to those realities.

However, the development of electronic payment mechanisms is vital to fostering the potential of the global electronic marketplace. Facilitating, as part of an integrated domestic and monetary policy, the evolution of competitive alternatives can also be endorsed. As consumers abandon money in favor of bank credits, there should be a willingness to endorse the further competitive introduction of new payment mechanisms. But the need for a uniform commercial law construct is apparent. Whether that framework evolves as a matter of law-making, or through effective industry self-regulation, is not as important as challenging the new technologies and their providers to integrate into the development process the formulation of the business practices and legal norms that are essential to earning consumer confidence.

Equally compelling is to affirm, as with the existing bank credits payment system, that our national currency remains important as a foundation of our confidence in the bank credits themselves. Although the meaning of money as authorized legal tender may be difficult to define with precision, there is no question that the indirect capability of each transaction to trace its value back to the obligations of the nation state represented by the U.S. dollar is vital to consumer confidence in those bank credits. The same need is likely to exist for the global markets of electronic commerce: both for consumers and for the national central banks' management of their economies, national monies must maintain their relevancy.

### **The Need for "Currency" in International Trade**

When considering the potential of the Internet and the World Wide Web to sustain global business, it is essential to emphasize the potential power of the consumer to pursue and seek to execute the purchase of

goods or services from virtually any location in the world. In those transactions, conducted entirely electronically, what will be vital is that we evolve proactively a certain uniformity in the options available for discharging the payment obligation. The challenge is to assure that, as substitutions for money, the global community has confidence in the meaning and definition of the alternatives.

Stored value and electronic cash are fundamentally important to this challenge. Responding to the combined realities that a) the money of any national currency has no predictable value and b) many credit payment systems, including that of the United States, have not yet evolved to allow for the cross-border recognition of the credits of non-domestic banks, commerce on the Net demands some mechanisms of payment which are, at least arguably, independent of the existing banking network. In addition, the capacity of the Net to provide secure payment mechanisms to the consumer for small transactions is indispensable to the realization of consumer participation in the electronic marketplace. These mechanisms, and the next generations which have not yet been invented, provide portable access to the digital contract structures which are the essence of doing business on the Net. Scalable to the global market, and capable of being accepted through nearly instantaneous means of verifying the creditworthiness of the obligation, these new mechanisms offer considerable potential for achieving progress in the marketplace.

What must be considered still is the bundle of policy issues associated with facilitating trade growth, particularly in promoting the future of electronic commerce, with the introduction of payment mechanisms which are independent of the existing infrastructures. We considered the same situation in assessing the suitability in commerce of private notes issued by railroads or by different state banks. In Europe, the situation is little different than the one considered in formulating the solution of the European Currency Unit.

Globally we now face similar circumstances: there is a tremendous range of national monies, bank credit systems or new payment mechanisms from which the consumer may choose. However, for the potential of Internet business transactions, governments--pressured to facilitate rather than serve as barriers--must nevertheless take into account the consumer need for both predictability and safety in the marketplace. The challenge is not to suppress alternative payment mechanisms, but to encourage their competitiveness, both with legal tender and with existing alternative payment systems (such as travelers checks or certain credit cards), by providing a predictability in their value.

I wish to also endorse the need to consider the proper and legitimate importance of taking account of the needs of government, particularly for monitoring the flow of goods and services across national boundaries. It is essential that, for the purposes of facilitating international trade, we define the principles of jurisdictional nexus and sustain the continued capacities of governments to legitimately collect the duties, taxes and fees which are vital sources of revenue for sustaining essential government services in supporting more open market policies.

Thus, for the consumer to participate in international trade, in order for electronic commerce to expand to its full potential, we must recognize that the payment obligation of every transaction requires attention. Trade, particularly for the consumer, requires a "currency"--a medium of exchange which can be exchanged in continuous transactions. Today, in the paper environment of national monies, there is little question, despite abandonment of the Bretton Woods accord, the \$100 bill is the currency of international transactions. But the Net requires a different solution--diversity in the mechanisms of payment can be encouraged, but only if the underlying legal frameworks provide predictability as to the value of the payment and the finality of the discharge of the payment obligation.

## **The Importance of UN/EDIFACT**

Beginning in 1986, under the auspices of the United Nations and the International Standards Organization, a monumental effort has proceeded forward to deliver to the future of international electronic commerce the tools required to allow our computers, our networks and our technology devices to sustain the potential of an open, electronic world marketplace. These activities, now being sustained by governments and companies from all of the continents of the world, have produced a remarkable result: a uniform, digital language which allows all buyers and all sellers to communicate the information required to do business regardless of the native language of the parties. Using comprehensive dictionaries of standard codes and syntax, commercial and governmental parties--manufacturers, transporters, bankers, insurers, and their administrative colleagues in tax, licensing, customs--can exchange the required information and execute and perform the series of contracts which are part of any international trade transaction.

Known as UN/EDIFACT, which is an acronym for electronic data interchange for administration, commerce and transport, we now have available a harmonized, single tool which can support global electronic commerce.<sup>(7)</sup> UN/EDIFACT continues to gain in its depth and its adaptability--the European Union has previously stated that the successful integration of UN/EDIFACT will be one of their highest priorities for facilitating the internal market growth of Europe. In the United States, the National Institute of Science and Technology has endorsed UN/EDIFACT as an acceptable standard for structuring all electronic data interchange applications of this government. Indeed, the use of UN/EDIFACT has been made a matter of national law in some countries.

Whether used in private networks or across the Internet, UN/EDIFACT is the emerging public standard of trade. It permits both companies and consumers to work on a screen in their language of choice, but allows the computers and the networks to automatically translate and process the communications in the background. UN/EDIFACT provides predictability and it provides certainty--these are essential attributes to facilitating the continued growth of the future of electronic commerce.

At first glance, the significance of UN/EDIFACT and its rapid development to the future of money may not be fully appreciated. However, UN/EDIFACT has confirmed that, when considering the existence of different private and national standards for formatting the "front-end" of trade communication (the payment being the "back-end") the global communities of business and government can effectively and successfully develop solutions for electronic commerce which evidence the necessary qualities of predictability and certainty. Faced with diversity in the availability of the different mechanisms for automating business communication, the international trade community, pursuing an open market for electronic commerce, has nevertheless forged a common framework of the tools and processes required for executing business transactions on the Net.

Moreover, history indicates that the private sector (which has provided much of the sweat equity toward the development of UN/EDIFACT) can demonstrate an awareness of, and accommodate, the needs of government in developing technology solutions for electronic commerce. Indeed, the acronym of UN/EDIFACT evidences a rare partnership--the tools were intended to be used equally by those performing the administrative governmental functions and the commercial parties themselves.

As the global community has been developing UN/EDIFACT, those active in the process have never failed to value, and give importance to the need for, the parallel development of defined business practices and uniform legal structures to support the execution of new electronic means of executing business transactions. In much of our work, we have emphasized the need for private sector leadership in defining legal solutions through the development of new business practices, rather than relying upon national or international law reform as a mechanism for change. Our focus has been consistent: advocate for commerce to set its own rules and encourage government to subsequently confirm in law the norms of commerce.

### **The Potential for Transnational Self-Regulation**

The introduction of new payment mechanisms requires, as an essential predicate, the formulation of an integrated framework of commercial practices and rule systems which will assure the predictability and consistency required to foster consumer confidence in their use. It is essential that we foster a global "currency" to sustain payments on the Net; it is likely that we will construct the solutions on the underlying tapestry of national and regional monies and the existing international framework of banking and government.

To commit to this objective requires a commitment by industry to invest the additional resources needed to bring to the payment obligation the same type of leadership and investment which has been made to formulate the global language for the contract and its performance represented by UN/EDIFACT. It is possible to overcome competitive differences and find the common elements around which predictability and consistency can be achieved, and to do so in a collaborative fostering of the requirements of government. The difficult is finding, for the global dimensions of the challenge, a suitable global venue in which to foster the debate and the accelerate development of appropriate solutions.

As commerce has extended into other global spaces--marine transport, air transport and now space itself--much of the international law that now governs commerce in those spaces was crafted through the formulation of industry-led solutions subsequently ratified as international law. For the Net, perhaps the last global space (and one wholly constructed upon privately-owned infrastructure), the lessons of history are compelling. Commerce should, and perhaps must, take the lead in crafting the business practices and attendant legal structures. To do otherwise invites national legislative and administrative intervention which can disable, through protective, uninformed or simply inconsistent law-making, the potential of the Net to serve as a marketplace for the world accessible through the power of our computers and our networks. Uniformity is an essential aspect of predictability.

The challenges for electronic payments are no different than for other attributes of the global information infrastructure and electronic commerce as a whole. It is my pleasure to report upon an initiative underway to develop and provide to the global community a methodology for developing solutions which takes account of the entwinement of government and commerce, technology and standards, and business processes and law. Proposed as the Internet Law & Policy Forum (the "ILPF"), over 20 multi-national corporate stakeholders in the future of electronic commerce have organized to establish a venue which can serve as a global resource for education and awareness and for coordination of the business and legal structures necessary to sustain a global electronic marketplace. (8) Most importantly, the Forum reflects a model for law-making for the future, which allows commerce its legitimate role in developing the necessary instruments of the marketplace.

The ILPF is a means of providing to commerce a methodology for developing suitable tools for achieving best business practices and resolving the legal aspects of electronic commerce and internetworking. The Forum is intended as a global, non-governmental organization endeavoring to produce uniform solutions acceptable to a global Internetworked community. Consistent with my remarks today, the Forum provides a means by which consortia, industry groups and governments can develop:

- uniform definitions of terms for commercial transactions.
- model agreements, codes of conduct or other commercial terms reflecting industry standards for a global space.
- model national laws (both statutory and administrative) as well as possible treaties or conventions.

In addition, the ILPF recognizes the need for collaboration with government and will endeavor to promote policy dialogues and seek to educate government on emerging uses, commercial practices and social ethics related to global electronic commerce. The Forum's sponsors seek to facilitate the emergence of an efficient and predictable marketplace in which electronic commerce can advance. (9)

In its design, the ILPF reflects the best attributes of what succeeds for industry self-regulation. It will operate on a market-driven basis, with business discipline, requiring defined work products to be produced against timetables and committed financial budgets. It will emphasize the partnerships between technology and legal standards and the necessity for informed dialogue between government and the private sector. Today, the ILPF is endeavoring to demonstrate its potential before permanent funding is secured through the execution of certain pilot projects.

As to the future of money, the attributes of the ILPF and its success in organizing to date--the success of the global business community in facilitating UN/EDIFACT--should be considered as strong endorsement for the potential of the financial community and the broader commercial community to organize and respond to the need for commercial legal structures for the new payment mechanisms. Whether organized under the proposed Forum, or as a collaboration among such organizations as NACHA or SWIFT, what is essential is to begin the process and to better promote the competitive potential of the new products by facilitating the emergence of a global environment that provides predictability to their use.

### **An Opportunity for Leadership**

One of the challenges for the new products remains the reluctance of national central banks to consider the emergence of non-cash payment mechanisms for the electronic age. The G-7 Working Group on Electronic Commerce has been exploring these issues; in their hearings a number of private banks have reported the national central banks, including Banque du France, Bank of England and the Federal Reserve Board are in denial about the impending changes. James Johnson, a private sector executive who chairs the United States G-7 negotiating team, has been calling for more global responsiveness. The World Bank is requested to add another day to their annual meeting in October to allow the member Ministers of Finance to be briefed on these same issues.

In the United States, throughout the last half-century, we have demonstrated leadership first in providing money with true, predictable value and second in expanding the global financial network to provide, among banking institutions, authentic, efficient means of transferring account deposits. The stability of our national

and international financial environment reflects the success of adapting payment mechanisms to be manageable tools in facilitating the management of economies and monetary policies.

For the new age of electronic commerce, leadership in considering non-cash payment mechanisms, and endorsing the development of commercial legal systems that relate to the value of national monies, will accrue continued benefits for the global currency value of the U.S. dollar and the accessibility of the U.S. market to global trade opportunities. Such leadership begins with collaboration and informed dialogue, but it would likely be useful for this Subcommittee to consider focusing the attention of the Federal Reserve Board on the needs of global electronic commerce and fostering an environment in which industry-driven resolve to advance self-regulatory solutions can be encouraged.

Thank you for your attention. I would welcome your questions and comments.<sup>(10)</sup>

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### **Notes**

<sup>(\*)</sup> Program Director, ECLIPS, Ohio Supercomputer Center and Chair, American Bar Association Committee on the Law of Commerce in Cyberspace before the House Subcommittee on Domestic and International Monetary Policy

<sup>1</sup> Kurtzman, *The Death of Money: How the Electronic Economy has Destabilized the World's Markets and Created Financial Chaos* (Simon & Schuster, New York, 1993).

<sup>2</sup> Sono, "Electronic Funds Transfer Blurs the Meaning of Money", *2 The DataLaw Report* 1 (May 1995).

<sup>3</sup> Kurtzman, note 1 *supra*.

<sup>4</sup> "A Commercial Lawyer's Take on the Electronic Purse", Second Discussion Draft dated May 20, 1996 was the subject of a drafting meeting held in late May. The Task Force on Stored Value Cards hopes to publish the final version of their report in August.

<sup>5</sup> Uniform Commercial Code, Section 1-201 (24).

<sup>6</sup> 31 U.S.C. 5103.

<sup>7</sup> UN/EDIFACT has been developed under the auspices of the United Nations Economic Commission for Europe Working Party on the Facilitation of International Trade Procedures. Significant materials regarding the Working Party and its activities may be found on the World Wide Web at [http://www.unicc.org/unece/trade/facil/wp4\\_tor.htm](http://www.unicc.org/unece/trade/facil/wp4_tor.htm) and [http://www.unicc.org/unece/trade/trade\\_h.htm](http://www.unicc.org/unece/trade/trade_h.htm).



8 Additional information regarding the proposed structure of the Internet Law & Policy Forum is located at <http://www.discovery.org/iltf.html>.

9 The Subcommittee staff has separately received additional documents relating to frequently asked questions (and the answers) regarding the ILPF and its objectives.

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