The Four Stages in the Electrification of Letters of Credit

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Introduction

In the euphoria of the 1990s accompanying the dot-com revolution, it was thought that electrification could be accomplished by legislation directed at removing benighted obstacles to the use of electronic communications. In this process, which often was both statutory and mandatory, it came to be grudgingly conceded that there were certain exceptions that had to be recognized, the most notorious of which was the obligation embodied in a negotiable instrument. It was, however, thought by many that these exceptions would erode more or less rapidly as the particular area accommodated itself to electrification or was bypassed and became an antiquated relic in the museum of commercial devices.

In retrospect, it may be seen that this approach was far too optimistic and perhaps too simplistic and that the electrification of commerce cannot be accomplished, or even sometimes hastened, merely by legalization.

This paper draws on the insights and lessons towards understanding the process of electrification of commerce from the perspective of an important instrument of commerce and finance, the letter of credit.[1] In a sense, the field of letters of credit is offered as an empirical laboratory in which the ongoing progress of electrification will be considered and obstacles, problems, and issues, weighed. There are considerable advantages to considering electrification from the point of view of letters of credit. Historically, letters of credit have been more amenable to electrification than many other types of commercial undertakings. From the mid-nineteenth

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[1] For the purpose of this paper, the term "letter of credit" and related terms are, unless otherwise apparent from the context, intended to connote the entire family or genus of letter-of-credit related undertakings, namely definite promises to pay on the presentation of required documents. This family includes so-called commercial letters of credit, standby letters of credit, independent guarantees, confirmations, pre-advices, and reimbursement undertakings. This typology of letters of credit is merely descriptive, there being no fundamental difference at the abstract level of law between the various members of the genus "letter of credit".

century, letters of credit were issued telegraphically,[2] and methods of authentication were quickly devised so that there were no objections to the enforceability of a letter of credit so issued, based on either the lack of a writing or authentication.

In addition, the letter of credit undertaking, unlike that contained in a negotiable undertaking, is not merged with the obligation so that there is no reification of the obligation in a unique piece of paper. While there are minimal formal requirements for an enforceable letter of credit,[3] namely a signed writing, they are not locked into a unique "operative letter of credit instrument" from the perspective of law of practice.[4] Some types of letters of credit, particularly those providing payment for transactions in goods,[5] require presentation of unique documents such as bills of lading or warehouse receipts. These documents have elements of negotiability in that the undertaking of the carrier or warehouseman is to deliver the goods to the person who presents it and is entitled to possession under the document. The paper-intense character of commercial LCs has caused corporate users and banks to endeavor to move towards paperless undertakings.

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[2] *See, e.g.*, WILBERT WARD, AMERICAN COMMERCIAL CREDITS 53 (The Ronald Press Company, 1922) (referring to cabling credits between beneficiaries and banks). See also *Tourists' Telegraphic Code for Use between Brown, Shipley & Co. And Users of their Travelling Credits* (1906) (providing shorthand codes for bank customers to use to telegram requests for funds and letters of credit to the bank) for a typical book provided for travelers who commonly resorted to traveler's letter of credit, a precursor to the credit card.

[3] Negotiable instruments, on the other hand, are laden with numerous restrictions and requirements making them cumbersome and largely irrelevant for many modern commercial uses and caused them to be by-passed in the real world in many respects. For example, what statutes say about negotiability has little to do with what bankers focus on, namely the "magic terms" of order or bearer and not the other elements of "negotiability".

[4] *See, e.g.*, the United Nations Convention on Independent Guarantees and Standby Letters of Credit (UN LC Convention) Article 72 (Issuance, form, and irrevocability of undertaking) (operative in "any form which preserves a complete record of the text of the undertaking and provides authentication of its source by generally accepted means or by a procedure agreed upon by the guarantor/issuer and the beneficiary"); the U.S. Model Uniform Commercial Code Article 5 (Letters of Credit) (U.S. Revised UCC Article 5) [hereinafter UCC Article 5] Section 5-104 (Formal Requirements) ("any form that is a record and is authenticated (i) by a signature or (ii) in accordance with the agreement of the parties or the standard practice referred to in Section 5-108(e)").

The undertaking itself can require that the "original" letter of credit and any amendments be presented. In that case, the operative instrument is simply another document which must be presented and on which the issuer's promise to pay is conditioned.

[5] These credits are properly understood as "commercial" letters of credit, although in some parts of the world misnamed "documentary" (because by their very nature all letters of credit are "documentary") letters of credit.

The operations or processes surrounding a letter of credit may be loosely divided into three phases which will be the basis for the treatment of the electrification of letters of credit in this paper. The phases are: (1) issuance of a letter of credit; (2) processing by the beneficiary and the LC banks: presentation and examination; and (3) payment.[6] For the purposes of this paper, issuance involves the process of release of the operative undertaking and its transmission to the beneficiary in a manner that enables the beneficiary to comfortably act on it. Presentation and examination involves the process of the creation of documents on which the letter of credit obligation is conditioned, their submission to a bank named in the credit to receive them, the forwarding of these documents to persons who have made an undertaking under the LC, their examination, any notification of refusal, and subsequent cures, if any. Payment involves the honor of the obligation of those persons making an undertaking on the letter of credit.

Each of these phases involves electrification to some extent, although the pace and depth varies. As indicated, the issuance of a letter of credit or amendments has been electrified since the invention of the telegraph. Payments have been accomplished through electronic means at least since the beginning of the twentieth century and, although there is little evidence, probably earlier. Their effectiveness depends to some extent on settlement or the ability to settle and may involve complexity in an international context, but, at the very least, electronic messages authorizing charges against correspondent accounts or reimbursement from correspondent accounts are readily electrifiable and have been so treated for decades. As will be described, the principal difficulty in the electrification of letter of credit practice has involved the second phase of the process, namely, the preparation and presentation of documents.[7] It is at this stage that many of the insights and lessons that are available from this field can be observed and considered.

In this context, it should be noted that the banks involved in letter of credit transactions have taken the lead in facilitating the electrification of letters of credit, most recently collectively, through the agency of SWIFT.[8] Apart from, and in a certain sense in parallel to, the evolution of

[6] While it is possible to add other dimensions to this such as the transfer of transferable letters of credit or amendments and other miscellaneous matters, these three general movements describe with considerable utility the basic operational flow of a letter of credit or letter of credit type instrument.

[7] Even at this stage, there has been electrification to a considerable extent. Major international banks currently scan documents presented and examine them at regional processing centers, moving them around the globe on a 24-hour basis.

[8] The Society for Worldwide Interbank Financial Telecommunication (SWIFT) is a private international cooperative society of over 9,000 banks and is headquartered in Belgium. It transmits financial messages. *See* SWIFT, www.swift.com (last visited Feb. 15, 2011). Because of political reasons, SWIFT has not emphasized the effect of its formatting on the substance of letters of credit, deliberately attempting to cast itself in a secondary role. It is not fully

letter of credit rules and law, the electronic processing of letter of credit operations has played a critical role.

For purposes of this paper, the process of the electrification of letters of credit is divided into four stages.[9] The stages suggested overlap one another to a certain extent and evince a certain arbitrary character regarding their application. They also operate at different paces with respect to each of the three phases into which letter of credit practice has been divided. Nonetheless, it is submitted that the stages do offer a useful tool, not only for the understanding of electronic commerce in general, but also for its increased utilization in a given field.

The four stages are: (1) the legalization of the utilization of electronic commerce; (2) the systemization of electronic commerce in that field; (3) the acceptance of electronic commerce as the norm for transactions; and (4) the transformation or evolution of the product as a result of the utilization of electronic commerce. Because of the limitations of any names, the stages will be explained subsequently in connection with letters of credit.

STAGE 1: Legalization of Electronic LCs

The first stage of electrification involves a process described here as "legalization". While this stage affects all three of the phases of letter of credit processing, namely, issuance, performance, and payment, it affects the process of issuance the most pronouncedly.

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appreciated to what extent the medium has shaped the message. This aspect of letter of credit standardization, however, is a field ripe for academic study. One clear example is the utilization of the terminology related to the "availability" of a letter of credit. This terminology, which quickly became embedded in SWIFT formats, has shaped the thinking of bankers to the extent that, although incomprehensible to most people, bankers continue to think in terms of a credit being available by sight payment, negotiation, deferred payment undertaking, or acceptance, as is reflected in the latest revision of the Uniform Customs and Practice for Documentary Credits, ICC Publication No. 600, effective 1 July, 2007 [hereinafter "UCP600"]. *See also* JAMES E. BYRNE ET AL., UCP600: AN ANALYTICAL COMMENTARY 25 (2010).

[9] It is not apparent to the author whether there has been any definitive treatment of the process of implementation of electrification, a study that would require drawing upon various disciplines, including business, sociology, law, and electronics. The categories suggested here derive chiefly from the author's experience and studies of electronic commerce over the last 25 years, a time that witnessed the evolution of the field from "electronic funds transfer" (EFT) to a whole new world of initials and concepts. In speaking of "stages", it is important to qualify the term. It is not used to suggest chronological or sequential steps that must be completed before "moving on" to another "stage". Perhaps the terms "field" or "area" better capture the notion that there are dimensions of the process of electrification which must be taken into account, but these terms have their own limitations as well. Consequently, the author has settled for the term "stages."

By legalization, what is meant is an attempt to provide a legal infrastructure which is conducive to utilization of electronic commerce. To a certain extent, that effort was represented by many of the statutory or model law attempts of the 1990s which attempted to provide recognition and acceptance of electronic data as the functional equivalent of paper-based data.[10] In the field of letters of credit, to a considerable extent that process involved the legalization of issuance or formation, formality, and payment systems.

As indicated, letters of credit have long been issued via telegraph and, as the methodology for telecommunication improved, by cable, telex, and increasingly by technologically sophisticated means of electronic data interchange. The more than 150 years of electronic issuance is an era in which the defense of failure to meet formal requirements with respect to the undertaking being in the form of a signed writing has rarely if ever been raised and never successfully so.

The legalization of the electronic issuance of a letter of credit in positive law first appeared in the process of the drafting of the first version of the U.S. Uniform Commercial Code. It was present in two distinct aspects, the general definitions provided in UCC Article 1 (General Provisions) and in the formality provisions of UCC Article 5 (Letters of Credit).

Prior UCC Section 1-201(46) defined "written" or "writing" as including "printing, typewriting or any other intentional reduction to tangible form. Section 1-201(39) defined "signed" as including "any symbol executed or adopted by a party with present intention to authenticate a writing.

The 1952 version of UCC Article 5 (Letters of Credit) represents a more dramatic recognition of electronic commerce. UCC Section 5-106(2)(a) (1952) (Establishment and Cancellation of a Credit) provided "[a] telegram may be a sufficient signed writing if it identifies its sender by an authorized authentication which may be in code."[11] Arguably, this provision is one of the first express statutory recognitions of electronic writings and signatures.[12]

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[10] In one of its most notable achievements, UNCITRAL has taken the lead in laying the basis for the extensive legislation that provides that where a writing is required that requirement is taken to have been met with electronic writing where certain conditions are fulfilled.

[11] UCC Section 5-106(2) (Establishment and Cancellation of a Credit) (1952) provides:

> Unless otherwise agreed a) A credit is established with relation to all parties when the beneficiary receives the letter of credit itself or authorized written advice of it, and it is also established with relation to the customer as soon as the letter of credit is delivered to him. A telegram may be a sufficient signed writing if it identifies its sender by an authorized authentication which may be in code. The authorized naming of the issuer in an advice of credit is a sufficient signing.

The 1952 version of the UCC was only adopted in the U.S. state of Pennsylvania. After its adoption, the New York legislature referred the 1952 Model UCC to its Law Revision Commission, which undertook a massive study of the Code which resulted in a number of

As a result, when the dot-com revolution occurred, the question of allowing for the electronic issuance of a letter of credit was a non-event. Not only were the definitions of "signed" and "writing" in Article 1 of the UCC sufficiently broad to encompass an electronic letter of credit,[13] but prior UCC Section 5-104 expressly embraced the notion of electrification by its reference to a telegraphic message.[14] Under the codification of common law represented by the UCC, extrapolation from express reference to telegraph to similar electronic methodology was not an issue and presented no problem.

The formulation of the provisions of the UN LC Convention was likewise unexceptional in that electronic issuance and amendment was taken for granted. As a result, UN LC Convention Article 7(2) provides for electronic issuance of letters of credit.[15]

The liberalized approach to the legalization of the electrification of formation of the obligation should be compared to the more restrained approach taken with respect to performance. In this, there is a lesson which perhaps may have implications beyond the field of letters of credit

While issuance and payment posed no challenges and the permissive drafting sanctioned but did not mandate electronic issuance, there were suggestions made that there should be a beneficiary right to make electronic presentation. As will be discussed under the stage of acceptance, this approach was not embraced and, happily, a more conservative approach was adopted. Under it, terminology was utilized which would support electronic presentations when the letter of credit allowed or permitted them, but the determination of whether or not documents could be presented electronically was otherwise left to the evolution of practice and not dictated by

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proposals, some of which were incorporated in the 1957 amendments to the Model Code.

[12] In its 1957 revision, UCC Section 5-104(2) (1957) provided that "a telegram may be sufficient signed writing if it identifies its sender by an authorized authentication."

[13] UCC 1-201 (General Definitions) defined "written" or "writing" as including "printing, typewriting or any other intentional reduction to tangible form." UCC 1-201(46). § 1-201(39) defined "signed" as including "any symbol executed or adopted by a party with present intention to authenticate a writing." UCC 1-201 (2002). *See also* UCC 5-104, Official Comment No. 2 (2002) ("the definition of "document" contemplates and facilitates the growing recognition of electronic and other nonpaper media as "documents.")

[14] UCC Article 5-104 Subsection (2) (1994).

[15] "An undertaking may be issued in any form which preserves a complete record of the text of the undertaking and provides authentication of its source by generally accepted means or by a procedure agreed upon by the guarantor/issuer and the beneficiary." UN LC Convention Article 7(2) (2000). The UN LC Convention may have been overambitious in providing for an electronic substitute of a writing in other situations such as acceptance of an amendment and cancellation, but presumably these matters can be sorted out through application of rules and practice.

positive law. This approach is one of great wisdom because it respects the idiosyncrasies of the field and concerns related to it which are discussed subsequently.

STAGE 2: Systemization of Electronic LCs

The process of systemization involves the creation of an infrastructure beyond that of the law to facilitate utilization of electronic commerce. Certainly this has practical dimensions with respect to electronics, computers, and similar matters which this author is not qualified to discuss, but it also involves matters of creating rules or protocols which facilitate electronic commerce. In the field of letters of credit, these efforts involve both rules of practice and systems.

Since the end of World War I, there has been an international movement to formulate rules of practice governing letters of credit. The importance of this movement has been heightened by the absence of any normative positive international law and, indeed, with the sole exception of the United States since the mid 1950s, of any positive domestic law regarding letters of credit.

There are three examples of the process of systemization of rules that illustrate this process. They involve two different phases of the letter of credit process, issuance and processing.

a. Default rules regarding issuance.

It was not uncommon for letters of credit that were sent by electronic transmission (described in letter of credit practice as "teletransmission") to also involve sending a paper document containing the teletransmitted text. This practice evolved out of the general conservative nature of bankers and may also have reflected some doubts regarding the so-called "advanced" methods of telecommunications and their reliability, security, and the completeness of the communication received. Under the rules of practice prior to UCP400 (effective 1983),[16] the default rule where there was such a dual transmission was that unless the undertaking provided that the electronic communication was the operative instrument, the paper version was by default regarded as the operative instrument and the electronic telecommunication simply as a courtesy.[17] In UCP400

[16] Uniform Customs and Practice for Documentary Credits, 1983 revision, ICC Publication No. 400 Article 12.

[17] UCP82 (1933) Article 9 ¶ 2 provided that when a bank gave an electronic notification of the issuance of a credit to a correspondent bank, the "original" must be sent to the correspondent. UCP222 (1962) Article 4 recognized that the issuer might rely solely on the electronic message without sending a mail confirmation. Depending on the intent of the issuer, either the paper version created by the issuer or the version printed or created by the correspondent or even beneficiary from the issuer's electronic communication might be the operative credit on which the beneficiary could rely. Where the credit or amendment is communicated by telecommunication or pre-advised, via telefax, the operative credit would be the printout of the telefax. *See also* BYRNE ET AL., *supra* note 8, at 25 (providing a comparison chart of prior versions from UCP82 to UCP600); DAN TAYLOR, THE COMPLETE UCP (ICC Publication No. 683) (containing the texts of prior versions of the UCP).

Article 12, this default rule was reversed, signaling the level of comfort of the international banking operations community regarding electronic telecommunication.[18]

This switch of the default rule was a significant moment in the electrification of letters of credit indicating the willingness of banks to assume that transmission of their undertakings electronically was the norm.

b. Provision regarding originality and authentication of documents.

As a result of the active involvement of the then leading figure in the field of letters of credit, Mr. Bernard Wheble, the then Chair of the ICC Commission on Banking Techniques and Practice, in the movement to facilitate electronic data interchange, as eCommerce was known at the time, the provisions of UCP400 were designed to provide support for the possibility of electrification. These provisions appear in UCP400 Article 22 (1983). UCP400 Article 22(c) provided that "unless otherwise stipulated in the credit, banks will accept as originals documents produced or appearing to have been produced: by reprographic systems; by, or as the result of, automated or computerized systems; as carbon copies, if marked as originals, always provided that, where necessary, such documents appear to have been authenticated." This provision addressed the question of performance and the presentation of documents. It attempted to accommodate the movement towards what were called "automated or computerized systems" and required that banks accept as "originals" documents which produced, were produced or appeared to have been produced by either "reprographic systems" or as a result of automated or computerized systems. While the motive was well intended, the drafting left much to be desired. This provision was taken forward into the next provision of the UCP, UCP500 Article 20 (1994).[19] This provision addressed several questions including what could also be accepted as an original document, how a document could be signed and what constituted a "copy".

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[18] UCP400 Article 12(a) provided:

> When an issuing bank instructs a bank (advising bank) by any teletransmission to advise a credit or an amendment to a credit, and intends the mail confirmation to be the operative credit instrument, or the operative amendment, the teletransmission must state "full details to follow" (or words of similar effect), or that the mail confirmation will be the operative credit instrument or the operative amendment The issuing bank must forward the operative credit instrument or the operative amendment to such advising bank without delay the teletransmission will be deemed to be the operative credit instrument or the operative amendment, and no mail confirmation should be sent, unless the teletransmission states "full details to follow" (or words of similar effect), or states that the mail confirmation is to be the operative credit instrument or the operative amendment.

UCP400 art. 12(a) (1983).

[19] UCP 500 Article 20 (b) provided that "Unless otherwise stipulated in the Credit, banks will also accept as an original document(s), a document(s) produced or appearing to have been produced: (i) by reprographic, automated or computerized systems; as carbon copies; provided that it is marked as original and, where necessary, appears to be signed. A document may be

With respect to the question of originality, the problem with the text as drafted was that it raised the questions (i) whether or not a document that was produced or appeared to have been produced by a computer had to be marked as an original, (ii) how it was that it could be determined whether or not a document was produced by reprographic, automated or computerized systems, and (iii) the impact of such a rule on a practice which is founded on the examination of documents "on their face". In a series of cases, the courts at first concluded that the lack of originality was a basis for refusal even regarding documents which appeared on their face to be originals.[20] This controversy led to an "opinion" by the ICC Banking Commission that, in effect, rewrote or reinterpreted the provisions in UCP500, which were, in turn, incorporated into UCP600 Article 16.[21]

These decisions caused considerable controversy throughout the world and lead to enormous disruptions of trade and commerce as well as considerable litigation, and it took considerable measures on the part of many to sort out the resulting mess.

A lesson to be learned from this is that inapt drafting or overly ambitious drafting can cause more harm than good.

c. Rules of practice regarding LC electrification.

A part from the rather crude attempts in UCP400 and UCP500 to accommodate electronic presentation, little was done in the UCP until the late 1990s. The Uniform Rules for Demand Guarantees (URDG 458) (1992) accommodated electrification with an expansive definition of

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signed by handwriting, by facsimile signature, by perforated signature, by stamp, by symbol, or by any other mechanical or electronic method of authentication." Subsection (c) continues: " (i) Unless otherwise stipulated in the Credit, banks will accept as a copy(ies), a document(s) either labeled copy or not marked as an original - a copy(ies) need not be signed. (ii) Credits that require multiple document(s) such as "duplicate", "two fold", "two copies" and the like, will be satisfied by the presentation of one original and the remaining number in copies except where the document itself indicates otherwise. UCP500 Article 20 (1994).

[20] This journey is detailed in James E. Byrne, THE "ORIGINAL" DOCUMENTS CONTROVERSY (1999) and marked by decisions such as *Glencore Int'l AG v. Bank of China*, Court of Appeal (Civil Division) [1996] 1 Lloyd's Rep 135, and *Kredietbank Antwerp v. Midland Bank PLC*, 1997 Nos. 609 & 123 (31 July 1997) (UK).

[21] ISP98 Rule 4.15 places the UCP article in the context of standard letter of credit practice but does not provide for such a mechanism to originalize a document by stamping a document "original," although it does not reject this usage. Instead, the ISP rule indicates when an original is required and establishes a presumption that documents are original unless they are apparently copes. Even when they are apparently copies, the rule provides that the presence of what appears to be an original signature renders them acceptable as originals. A more detailed analysis and further insights are provided in JAMES E. BYRNE, ISP98 & UCP500 COMPARED (IIBLP 2000).

"writing".[22] The first serious attempt to provide rules for electronic presentation was in the International Standby Practices (ISP98).[23] It provides definitions that can be used where an ISP98 undertaking permits or requires electronic presentation[24] and in a provision to be discussed in the next section, permits electronic presentation in one situation where the ISP98 undertaking does not expressly permit it.

As indicated, the evolution of the UCP towards accommodation of electrification began with UCP400 and gradually increased to the point where the drafters of the UCP squarely faced the question of what to do about the possibility of electronic performance, that is, the presentation of electronic documents. Rather than revising or altering the UCP regime, they decided to create a supplemental set of rules which were labeled the eUCP.[25] Originally released in 2002 as a supplement to UCP500, they were revised in 2007 to supplement UCP600. These rules contain a fairly sophisticated scheme by which both paper and electronic documents can be presented, by which issues regarding authenticity can be determined, allocating risk of nonreceipt of an electronic communication, address questions related to notice of refusal, originality and copies, date of issuance, transport, and the corruption of an electronic record after it has been presented.

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[22] URDG 458 Article 2(d) provided that "writing" and "written" included "an authenticated teletransmission or tested electronic data interchange ("EDI") message equivalent...." While couched in the older terminology related to eCommerce, this provision attempted to provide a rule of formality that embraced electronic telecommunications.

[23]ISP98 was drafted by the Institute of International Banking Law and Practice, endorsed by UNCITRAL and the International Chamber of Commerce, and is ICC Publication No. 590.

[24] ISP98 Rule 1.09(c) (Defined Terms) offers definitions for "electronic record", "authenticate", "electronic signature", and "receipt". ISP98 Rule 1.09(c) (1998) provides that in a standby providing for or permitting electronic presentation, "Electronic Record" means (i) a record (information that is inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form); (ii) communicated by electronic means to a system for receiving, storing, re-transmitting, or otherwise processing information (data, text, images, sounds, codes, computer programs, software, databases, and the like); and (iii) capable of being authenticated and then examined for compliance with the terms and conditions of the standby; "Authenticate" means to verify an electronic record by generally accepted procedure or methodology in commercial practice: (ii) the identity of a sender or source, and (ii) the integrity of or errors in the transmission of information consent; "Electronic signature" means letters, characters, numbers, or other symbols in electronic form, attached to or logically associated with an electronic record that are executed or adopted by a party with present intent to authenticate an electronic record; and "Receipt" occurs when: (i) an electronic record enters in a form capable of being processed by the information system designated in the standby, or (ii) an issuer retrieves an electronic record sent to an information system other than that designated by the issuer."

[25] Supplement to the Uniform Customs and Practice for Documentary Credits (UCP 500) for Electronic Presentation, Version 1.1 (2002).was aligned with UCP500 (1993). eUCP Version 1.1, Supplement to UCP600 for Electronic Presentation (2007) is aligned with UCP600 (2007).

As intimated, with respect to issues of performance under letters of credit there is a significant difference between commercial letters of credit and standby letters of credit, independent guarantees, and reimbursement undertakings. With respect to the former, it is expected that there will be regular presentations of documents whose operative original is significant. With respect to standby letters of credit and independent guarantees, it is unlikely that there would be an original document presented which has any unique significance.

In the pre eUCP attempts to accommodate letter of credit practice to electrification, considerable time and energy was spent seeking alternatives to order bills of lading which tended to present the most serious obstacles to the electrification of performance or presentation of documents under a letter of credit. Although attempts were made to provide for electrification of documents by contract,[26] absent an international legal regime giving effect to such undertakings, the possibility of electronic bills of lading that would be widely accepted by banks is nonexistent.[27]

Leading figures in the UCP world attempted to circumvent these limitations by pressing for documentation which did not require unique originality, particularly in the form of a so-called "sea waybill". While it was not entirely clear what was the character of this undertaking, it was largely understood to be a receipt for the goods and a contract for carriage but not a document representing title to or control of the goods. As a result, it could not be said to be "negotiable". Nor was there any obligation on the part of the carrier to deliver the goods to the person entitled under the document such that that person could itself issue a delivery order requiring such delivery to the holder of the order. Under a sea waybill, the contractual obligation of the carrier was to deliver the goods to the named consignee without more. Possession of the document was irrelevant with respect to this obligation.

While UCP500 contained Article 24, regarding sea waybills, carried forward in UCP600 Article 21, these provisions were not widely used and have been largely bypassed.

The eUCP solution was relatively simple, namely to permit the presentation of both paper and electronic documents under the same credit. This approach caused some practical problems

[26] The experiments began with the efforts of Chase Manhattan Bank to provide for electronic bills of lading in CBOL, a project that foundered on the unwillingness of other banks to support a system operated by a competitor and the unwillingness of Lloyds of London to insure the process due to the absence of any basis on which to determine potential risk. They continued to SWIFT's Bolero, a project that was based on a contract to deliver the goods rather than a statutory scheme embracing electronic bills of lading. As should have been obvious to a first year law student, private contracting would not answer the problems of priority in the case of insolvency.

[27] An interesting, albeit local, exception exists with respect to the US market for cotton warehouse receipts in which there is a federal statute supporting electronic warehouse receipts. The limited nature of the market makes such a device possible.

regarding presentation,[28] the time within which a notice of refusal must be given,[29] and whether a presentation can occur by means of a hyperlink.[30] It was also necessary to formulate a definitional distinction between paper documents and electronic documents.

In URDG 758 (2007), the current iteration, an attempt has been made to address issues that arise when electronic presentation is permitted but there is no expansion on the eUCP and less accommodation than is present in ISP98.[31]

Although rules have played a role in the electrification of LCs, most of the work has been accomplished through standardization. In this regard, SWIFT, a cooperative organization created by international banks[32] has pursued an agenda encouraging electronic messaging so as to reduce paper and to increase the dependability and authenticity of such communications. In this regard it has been highly successful and has created a set of message types regarding letter of credit related communications. The protocol surrounding these communications, as indicated, have to a certain extent influenced the practice related to letters of credit, as is inevitable, notwithstanding many disclaimers on the part of SWIFT to do so. To a certain extent, this process has supplanted

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[28] eUCP Article e5 (Presentation) permitted documents to be presented separately and at different times, required an electronic address for electronic presentation, and required that it be possible to identify the credit under which the document was presented.

[29] eUCP Article e7 (Notice of Refusal) imposed a requirement that the beneficiary present a notice of completeness signaling that the presentation was ready to be examined. It also provided for disposal of refused electronic records where no instruction regarding their disposition was forthcoming within 30 calendar days.

[30] eUCP Article e6 (Examination) treats a hyperlink that is accessible as if it is a document presented.

[31]URDG 758 Article 14(c) (Presentation) attempts to operate as a mini eUCP, requiring that format, the system for data delivery, and the electronic address be specified and providing default rules where this information is not specified or the eDocument cannot be authenticated. URDG 758 Article 14(c) says that "where the guarantee indicates that a presentation is to be made in electronic form, the guarantee should specify the format, the system for data delivery and the electronic address for that presentation. If the guarantee does not so specify, a document may be presented in any electronic format that allows it to be authenticated or in paper form. An electronic document that cannot be authenticated is deemed not to have been presented." Art. 14(d) provides "where the guarantee indicates that a presentation is to be made in paper form through a particular mode of delivery but does not expressly exclude the use of another mode, the use of another mode of delivery by the presenter shall be effective if the presentation is received at the place and by the time [in compliance with this article]." And Art. 14(e) provides "where the guarantee does not indicate whether a presentation is to be made in electronic or paper form, any presentation shall be made in paper form. *Id.* (2010).

[32] See *supra* note 9.

the role of forms as a means of standardization although with regard to certain rules of practice, particularly related to standbys and independent guarantees, the role of forms retains its significance because SWIFT formatting is essentially a blank slate.

In the last year, SWIFT has initiated a process to develop messages specifically designed for standby letters of credit and independent guarantees with the intention of replacing the free formatted messages currently in use where such undertakings are issued or processed electronically.

STAGE 3: Acceptance

The acceptability of electrification of a field is essential for the adoption of any program of electrification. While it is relatively easy to create a legal framework, rules, and systems, it is much more difficult to mandate market acceptance in any effective manner.

The eUCP drew upon much of the wisdom and learning in place at the time to provide parties to letters of credit with a framework and structure that supported electronic presentations. As indicated, it was this aspect of the letter of credit process which had been most resistant to electrification. To date, to the knowledge of the author based on global informal surveys, there has been one instance in which these rules were utilized and that one instance was a mistake in which the bank utilizing the rules did not permit presentation of an electronic document.[33] In the field of letters of credit, this process of acceptance is to a considerable extent a matter of comfort both with respect to the banks issuing letters of credit, their customers, the applicants, and beneficiaries as well as various correspondent banks that play a role in the letter of credit process.

The classical illustration of this point arose in the context of drafting the UN LC Convention. Since this document related to independent guarantees and standby letters of credit, undertakings not requiring unique documents, it was taken for granted by attorneys and legal scholars unfamiliar with letter of credit practice that it would be possible and, indeed, desirable to provide as a default rule that unless the undertaking provided otherwise presentation of an electronic document complied. The difficulty, however, was that this did not correspond with either practice or the expectation of issuers of standbys or independent guarantees. Their expectation was that a paper document must be presented, even though there was no particular desirability of a piece of paper or any particular advantage in terms of authenticity, rather than an electronic document. As a result, any rule that so provided would either be continually varied, a clear sign that the rule is wrong, or there would be another reason for refusing to invoke application of the legal scheme whatsoever. As a result, as indicated, the UN LC Convention and corresponding provisions in Revised UCC Article 5 avoided taking a position with regard to the default rule as to whether paper or electronic documents would be required, and left it simply to questions of

[33] This was made by the Korean Exchange Bank in December 2010. ePresentation documents surrounding the LC, which included certificate of weight, certificate of analysis as well as the bill of lading and insurance certificate were handled through Bolero's trade platform. *See KEB issues first paperless LC under eUCP*, Trade Finance Magazine, Dec. 14, 2010.

practice. This approach was wise because the other default rule would have unfortunately have hindered the evolution towards an electronic default rule.

An important insight into the frontiers of this issue is contained in ISP98 Rule 3.06 (Complying Medium of Presentation).[34] This rule was drafted from the perspective of the exercises which produced revised UCC Article 5 and the UN LC Convention and was intended to accommodate both texts. Rule 3.06 provided that the norm was that there would be presentation of a paper document.[35]

It was, of course, recognized that the undertaking could provide for presentation of electronic documents. It should also be recognized that there are a number of standby letters of credit that allow for electronic presentation and even for presentation by means of telefax.[36]

The notable exception is a situation where a standby letter of credit required presentation only of a demand where the beneficiary was an institution with access to authenticable communications. Standard practice was that in such a situation there was no need to make a paper presentation and indeed an expectation that there would be an electronic presentation and no need to expressly so state in the undertaking. In such a situation ISP98 Rule 3.06(b)(i) allows "a demand presented via SWIFT, tested telex, or other similar authenticated means by a beneficiary that is a SWIFT participant or a bank" would comply, notwithstanding the fact that there was no provision in the independent guarantee subject to ISP98 permitting presentation by an electronic media.

As noted, the ICC's latest exercise in rulemaking for independent guarantees, the URDG 758 (effective 1 July 2010) contains no parallel provision although it has copied the ISP extensively.[37]

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[34] ISP98 Rule 3.06 (Complying Medium of Presentation) provides that "(a) to comply, a document must be presented in the medium indicated in the standby; (b) where no medium is indicated, to comply a document must be presented as a paper document, unless only a demand is required, in which case: (i) a demand that is presented via SWIFT, tested telex, or other similar authenticated means by a beneficiary that is a SWIFT participant or a bank complies; otherwise (ii) a demand that is not presented as a paper document does not comply unless the issuer permits, in its sole discretion, the use of that medium; (c) a document is not presented as a paper document if it is communicated by electronic means even if the issuer or nominated person receiving it generates a paper document from it; (d) Where presentation in an electronic medium is indicated, to comply a document must be presented as an electronic record capable of being authenticated by the issuer or nominated person to whom it is presented." ISP98 (1998).

[35] *Id.*

[36] Landlord/tenant standbys are a good example, as are undertakings for the Chicago Commodity Exchange.

[37] ICC Uniform Rules for Demand Guarantees (hereinafter URDG) 758 (2010). Interestingly, although in many respects the URDG 758 copies provisions of the ISP, it did not

The lesson to be learned from this stage of electronic acceptability is that attempts to mandate by legislative fiat are bound to fail.[38]

The degree of comfort must be achieved not only by those who make independent undertakings which include banks and financial institutions, the beneficiaries of those undertakings one would expect would favor the ability to make electronic presentations, but also those who are obligated to reimburse the financial institutions and those in the background who make the transaction work. It is no great surprise that the normal conservative character of commerce and finance would slow down the acceptance of electronic telecommunication in this field.

It is interesting to note that an end-run to what might be perceived to be a logjam is being orchestrated by banks and SWIFT through the mechanism of a "TSU" or trade services utility. This approach is in part a reaction to the fairly dramatic decrease in the number of commercial letters of credit that are being issued and the abandonment of this instrument in favor of either commercial standby letters of credit or open account undertakings. This movement, parenthetically, is likely to be accelerated in the event that the risk weighting capitalization proposals inherent in Basel IV are implemented assigning a risk weighting of 100 percent to commercial letters of credit as well as standbys and independent guarantees. In that case, it is unlikely that sophisticated customers would be prepared to tolerate the increasing complexity of the commercial letter of credit practice and would abandon it wholesale either in favor of open account or commercial standbys. While, as may well be expected, traditional practitioners and the letter of credit community bemoan this development, the reality is that due to the increasing layers of complexity letters of credit are often an excuse for nonpayment rather than a mode of payment. If that is the case, true guarantees in insurance policies already provide adequate sources of nonpayment without the need for the existence of an alternative.

STAGE 4: The Transformation and Evolution of the Product

The stage related to the transformation or evolution of the product is based on the notion that by admitting and embracing the electrification of data there is and can be both a doctrinal evolution in the nature of the product and a transformation of the product itself. While there is a certain degree of speculation involved in this notion and it may not be applicable to all products where electrification is involved, the LC experience offers a glimpse of what can happen which may be worth consideration. As a result, three discreet examples are discussed. Even though the LC itself is only at the threshold of anticipating electronic presentations, it is possible to glimpse the impact of electrification on the LC of the future.

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recognize the standard practice with respect to standbys that permitted electronic presentation of documents under clean standbys.

[38] This evokes the lesson gleaned from *King Canute and the Waves*, a legend familiar to English schoolchildren of King Canute and the Waves in which King Canute (of Denmark) sat on a throne on the shore of the ocean and commanded the waves to recede, which of course they did not.

The first situation which illustrates the potentiality of eCommerce for the letter of credit product relates to oil fluctuation clauses. Oil is a highly volatile commodity whose price fluctuates rapidly and within a fairly wild range of extremes. It is also a product for which letters of credit are commonly used either in the form of commercial or standbys letters of credit to assure or back up payment. The difficulty with the utilization of a traditional letter of credit is the expectation that the letter of credit will state a maximum amount. For an oil fluctuation clause, the presence of such a maximum defeats, to a certain extent, the purpose of the oil fluctuation credit. What is wanted on the part of the beneficiary is an undertaking from the issuer that it will pay the price of the oil however it may fluctuate. Accordingly, such a letter of credit cannot state a price in a fixed amount but rather a price which is linked to some objective source by which the price can be measured. Commonly, the linkage is to well-known market surveys such as Plats for a given region. The terms of the letter of credit might provide a specific amount and then state that, notwithstanding this amount, the undertaking is to pay the current market value as indicated in the applicable Plats publication for the period.

When a bank issues a letter of credit containing an oil fluctuation clause, the question arises whether or not such a clause is enforceable and the undertaking containing it constitutes a letter of credit. There may be other issues regarding such a clause, on the level of the safety and soundness of the provision, but the operative legal question is whether or not such a clause is possible within an undertaking denominated as a "letter of credit."[39]

The problems with an oil fluctuation clause arise from the notion that the letter of credit ought to contain all of its provisions within its "four corners." Put another way, the notion would be that reference to a source outside the context of a letter of credit constitutes a non-documentary condition rendering the undertaking something other than a letter of credit, namely a simple contract to which to use enforcement, the argument of indefiniteness or uncertainty may be raised. In the same vein, it may be alleged that a letter of credit is a "definite" undertaking and that such a clause renders it fatally indefinite.

In assessing the validity of these claims, it must be asked whether or not it is possible to turn to objective sources in order to determine the character of an undertaking. The clearest example of such a provision would be the question of whether or not the interest that may be charged in a promissory note which is a negotiable instrument can be linked to an objective formula such as a given bank's published prime bank rate or based on a calculation predicated on U.S. Treasury obligations of a certain duration. It has long been settled that objective criteria by which a calculation may constitute a proper reference for an instrument that retains the element of negotiability.[40]

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[39] The safety and soundness concerns relate to whether the obligation is properly reflected on the books of the bank and whether it is adequately captialized.

[40] *See Taylor v. Roeder*, 360 S.E.2d 191 (Va. 1987) (concluding that a note providing for a variable rate of interest, not ascertainable from the face of the note, is not a negotiable instrument.) The holding of this case was within months reversed by the Virginia legislature and the Model Code provision on which it was based was superseded when Virginia adopted the

By analogy the same argument can be made with respect to the letter of credit. Reference to an objective and readily available index is not something that renders the undertaking obscure or indefinite and is not "non-documentary in the sense that it is possible to make an objective verification of the data. There is little difference between an undertaking to pay at a rate calculated if one were to provide a photocopy of the plat rate and a situation where the bank determines what constitutes that rate. Although there is some difference, the bank must make determinations that are technically not documentary regarding the date and time of presentation and whether or not it was timely or whether or not in some standbys an advanced payment was made to an account in the bank or an advanced payment guarantee or standby was lodged with the bank.[41]

Accordingly, it is possible to link the undertaking with matters which can be objectively verified.[42] There is no reason that this data capable of external verification must be embodied itself in a paper format and not by means of electronic determination. As a result, it would be entirely appropriate for an amount to be determinable based upon reference to a source which is available electronically.

1990 Model Code, effective in 1993, which provides that "Interest may be stated in an instrument as a fixed or variable amount of money or it may be expressed as a fixed or variable rate or rates. The amount or rate of interest may be stated or described in the instrument in any manner and may require reference to information not contained in the instrument. If an instrument provides for interest, but the amount of interest payable cannot be ascertained from the description, interest is payable at the judgment rate in effect at the place of payment of the instrument and at the time interest first accrues." UCC 3-112(b) (2002).

[41] ISP98 Rule 4.11 (Non-Documentary Terms or Conditions) (c) provides: "Determinations from the issuer's own records or within the issuer's normal operations include determinations of: (i) when, where, and how documents are presented or otherwise delivered to the issuer; (ii) when, where, and how communications affecting the standby are sent or received by the issuer, beneficiary, or any nominated person; (iii) amounts transferred into or out of accounts with the issuer; and amounts determinable from a published index (e.g., if a standby provides for determining amounts of interest accruing according to published interest rates." ISP98 (1999).

[42] *See, e.g.*, *Korea Exchange Bank v. Standard Chartered Bank*, Suit No. 162 of 2004 (REGISTRAR'S APPEAL No. 307 of 2004) [Singapore] (holding that an oil price fluctuation clause that is linked to a published table and that operates without amendment controls over a specific amount and a specific tolerance stated in the appropriate SWIFT Fields for amount and amount tolerance so that the amount available under the credit can be greater or lesser than that stated). For further analysis, see James E. Byrne & Christopher S. Byrnes, ANNUAL SURVEY OF LETTER OF CREDIT LAW & PRACTICE 376 (Institute of International Banking Law & Practice 2006).

In a similar vein, it may be asked whether or not verification of the objective accuracy of a representation might not be made electronically and whether or not that verification might constitute a basis for refusal.

To give an example, if a letter of credit called for a statement or document to the effect that goods were laden on board a named vessel at a given location on a certain date, it is possible based on sources now available and available electronically to determine whether or not that given vessel was at the indicated location on the given date. In such a situation, it may be asked whether or not an issuer or guarantor of an independent undertaking could refuse payment even if the document presented demanding payment contained terms which complied with the terms and conditions of the letter of credit.

Under current law and practice, there is, to a certain extent, an answer to this question. The answer is that it is available to the issuer or guarantor to refuse payment predicated on letter-of-credit fraud or abuse.[43]

The question in such a situation would then come to one of whether or not the guarantor or issuer had met its burden of proving that the recital or representation was fraudulent and this would come down to a matter of proving the reliability of the data and its voracity that gave rise to the information recited. The fact that it is available electronically should not in itself defeat the admissibility of such evidence which ought to be treated in the same mode as would a representation in a paper medium. That question ought to be resolved on the reliability of the medium and the availability of other evidence in support of the assertion rather than the format in which the information is contained. This question arose in the context of a recent case, *MAP Marine Ltd. V. China Construction Bank Corp.*[44] In that case, a letter of credit was issued to pay for a vessel charter in connection with the shipment of goods. The bank alleged that there was Letter of Credit Fraud or Abuse based on data regarding the location of the vessel that it obtained from a website. The court, however, refused to allow this evidence to be admitted, holding that "[t]he authoritativeness of the Web site on which [the bank] relied regarding the location of plaintiff's vessel was questionable and not an appropriate subject of judicial notice." While there may have been particular deficiencies with respect to the evidentiary proffer, there should not in

[43] *See* UN LC Convention Arts. 19 and 20 and UCC 5-109 (2000).

[44] 70 A.D.3d 404 (N.Y. App. Div. 2010), *aff'd per curiam*, *(*2010 N.Y. App. Div. LEXIS 8897 (N.Y. App. Div. 1st Dep't, Nov. 30, 2010)). The court concluded that Transferee MAP Marine's conduct in seeking a change in the letter of credit to reflect that it was for the shipping service rather than for the cargo, and in seeking rapid payment. It further stated that Transferee did not improperly attempt to seek payment despite knowledge that more extensive documentation was required under the letter of credit issued in favor of the purchaser of the cargo, inasmuch as the obligations under Transferee's letter of credit and the underlying sale of the cargo were independent, Transferring Bank Banca Monte failed to raise an issue of fact with respect to the alleged falsity of the documentation presented by plaintiff. The *MAP* court ruled that presentment documents necessary for plaintiff to draw on its transfer letter of credit were reasonable.

principle be any objection to referral to electronic data to determine fraudulent conduct. Of course, the issuer or guarantor must prove the existence of Letter of Credit Fraud if it refuses on that ground a presentation that complies on its face with the terms and conditions of the independent undertaking.[45]

In addition, the further question is raised as to whether or not the undertaking of an issuer or guarantor could be conditioned on corresponding data being contained in a given base. The point of such a requirement or condition would be that it would no longer be necessary for the issuer or guarantor to prove that the information contained in the database was true or that the beneficiary or a person providing this information to the beneficiary committed "fraud" but simply a question of whether or not the data or representations reflected in the documents presented corresponded with the requirements of the credit. In this sense, the requirements of the credit would include not simply the statements contained in the credit but also correspondence with databases regarding those statements.

The great advantage of such an approach is that it makes available to the issuer/guarantor and correspondingly the applicant, a valuable tool against beneficiary fraud or abuse. From the perspective of the beneficiary the question is whether or not this requirement poses a subjective or discretionary basis by which refusal can be defended. Where the source is not subjective, it would seem that it would not.

The obvious basis for objection to such a provision would be the doctrine of the independence or abstraction of the letter of credit undertaking. That abstraction, however, used with respect to factual determinations which would require reference to ultimate facts which admit of varying interpretations and which require an exercise of judgment. It has long been recognized that although there is in a limited sense a factual inquiry as to whether or not a given document contains certain terms that are in compliance with the terms and conditions of the independent undertaking, that this inquiry is entirely consistent with the independence principle and indeed constitutes the very nature of the independent but conditional undertaking. There is no inherent reason why this process of examination and determination of compliance must necessarily be limited to a determination of terms and conditions contained in the letter of credit or independent guarantee itself. There are, of course, certain limits imposed by the notion of fair play, namely that one cannot be expected to have to guess what are the requirements of the letter of credit or independent guarantee. As to that question, the failure of the undertaking to so state would render it not an independent undertaking. But where the undertaking contains a statement or required statement regarding something and the further requirement that this be consistent with data contained in a certain objective and reliable database, an entirely different regime entails.

Moreover, it has long been recognized that LC Fraud or Abuse is an exception to the independence principle.

As a result, it may be speculated that the letter of credit of the future, while remaining independent in a certain form of assurance of payment, nonetheless offers to all parties an

[45] See UN LC Convention Article 19 and US Revised UCC Section 5-109(a).

enhanced ability to provide assurance of actual performance, reducing risk of fraud and expense inherent in the transaction.

Similar matters may arise with respect to determinations of the objective compliance of the goods with certain norms as the result of actions by testing agencies and whether or not the goods are actually laden on board a given vessel, etc. The possibilities are endless. The limits are the objectivity of the source and a matter of encompassing or encapsulating them which assures the integrity of the undertaking. Into this brave new world of electronic letters of credit or independent guarantees, it is possible to project a more dependable, more certain, less expensive and more efficient mechanism to assure payment.