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SHORTER ARTICLES/COMMENTS

THE UNCITRAL MODEL LAW ON INTERNATIONAL CREDIT FUNDS TRANSFERS[1]

I. ORIGINS AND BACKGROUND

A. *Introduction*

IN recent years, since the launching of the Singapore Government's campaign for a "cashless society", electronic funds transfers have become an indispensable part of most financial transactions in Singapore. There is now a proliferation of Automated Teller Machines ("ATMs"), Electronic Funds Transfer at Point of Sale ("EFTPOS") effected through "NETS" (Network for Electronic Transfers), interbank Giro[2] payments and telephone banking transactions ("phonebanks"). The law has understandably not quite kept pace with the leaps in technological developments especially in the field of computerisation. It may thus interest readers to know that the United Nations Commission on International Trade Law (UNCITRAL) had in 1987 published a Legal Guide on Electronic Funds Transfers ("Guide").[3] UNCITRAL's work in this area has fortunately not stopped at the Legal Guide. In 1986, UNCITRAL at its nineteenth session decided to prepare a Model Law on Electronic Funds Transfers.

B. *UNCITRAL's Work on Electronic Funds Transfers*

From the mid-1970s, UNCITRAL has been considering the legal issues pertaining to electronic funds transfers. The UNCITRAL Study Group on International Payments, which is composed of experts from international

1 This article is based on a paper presented at the UNCITRAL Seminar on International Trade Law at Bangkok (3-5 November 1992) and at Jakarta (9 -10 November 1992) respectively. This paper is written in the writer's personal capacity.

2 The word "giro" is derived from the Greek word for circle.

3 United Nations publication, Sales No E87 V 9 ISBN 92-1-133299-0, A/CN 9/SER B/1.

organisations and banking and trade institutions, was involved in considering the influence of electronic techniques on the future course of development of the international funds transfer system. In 1978, UNCITRAL included the topic of electronic funds transfers in its programme of work.[4] As part of the preparatory work on this topic, the UNCITRAL Secretariat identified some of the legal problems.[5] The report noted that electronic funds transfer systems had developed in a partial legal vacuum. In many countries it was assumed that the law relating to paper-based transfers also applied to electronic funds transfers, at least in part. However, it was seldom clear to what extent it applied. Moreover, the existing law was not intended to govern electronic funds transfers and, hence, may not be completely appropriate for such transfers. In the field of international funds transfers, these problems were magnified in the absence of an adequate international legal framework.

On the basis of the above report by its Secretariat, UNCITRAL decided in 1982 to prepare the Legal Guide on Electronic Funds Transfers.[6] The Guide was prepared by the Secretariat in consultation with the UNCITRAL Study Group on International Payments. The first draft was completed and submitted to UNCITRAL in 1985. It was subsequently circulated to Governments and interested international organisations for their comments. In 1986, UNCITRAL authorised the publication of the Guide as a product of the work of the Secretariat.[7] The Guide had by then been modified to take into account the comments received from Governments and international organisations.

The Guide is intended to identify the legal issues arising from electronic funds transfers and to discuss various approaches in dealing with these issues. Alternative solutions are offered. The principal purpose is to aid legislators and lawyers in formulating the rules for particular networks. There has been a deliberate effort to seek the common elements in the laws and banking practices of a number of countries so as to facilitate the process of adapting existing law to the requirements of electronic funds transfer techniques.

It is 150 pages in length and is divided into five chapters as follows:

Chapter I - Electronic funds transfer system in general
Chapter II - Agreements to transfer funds and funds transfers instructions

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4 Official Records of the General Assembly, 33rd session, Supplement No 17 (A/33/17), at paras 67(c)(ii)(b), 68 and 69.

5 Electronic funds transfer: Report of the Secretary-General, A/CN 9/221 and Corr 1.

6 Official Records of the General Assembly, 37th session, Supplement No 17 (A/37/17), at para 73.

7 Official Records of the General Assembly, 41st session, Supplement No 17 (A/41/17), at para 229.

Chapter III - Fraud, errors, improper handling of transfer instruction and related liability
Chapter IV - Finality of funds transfer
Chapter V - Legal issues raised by electronic funds transfer

The Guide refers to a number of international and banking organisations and their work. These organisations are usually referred to by their acronyms. It would be useful to set down the acronyms of these organisations as follows:

(1) ISO - International Organisation for Standardisation
(2) SWIFT - Society for Worldwide Interbank Financial Telecommunications
(3) BIS - Bank for International Settlements
(4) CHIPS - Clearing House Interbank Payment System in New York
(5) CHAPS - Clearing House Automated Payment System in London
(6) SAGITTAIRE - High value computer to computer network in France entitled *"Systeme automatique de gestion integree parteletransmission de transactions avec imputation de relegments 'Etranger'* "
(7) Fedwire - Electronic credit-transfer network operated by the Federal Reserve System in the United States

II. Model Law on International Funds Transfers

A. *Introduction and Background*

UNCITRAL's work in this area has fortunately not stopped at the legal Guide. In 1986, UNCITRAL at its nineteenth session decided to prepare Model Rules or a Model Law on Electronic Funds Transfers. This work was entrusted to its Working Group on International Payments which identified the legal issues which should be included in the Model Rules. UNCITRAL also decided at its twenty-first session in 1988 that while the Rules should concentrate on problems arising in international funds transfers, it would have to consider both domestic and international aspects of such transactions too. To what extent the rules would be applicable to domestic funds transfers was an issue that was deferred for a decision in the future.[8]

[8] Official Records of the General Assembly, 43rd session, Supplement No 17 (A/43/17), at paras 11, 12 and 13.

The Working Group at its sixteenth session in November 1987 considered a number of legal issues identified by the UNCITRAL Secretariat.[9] The Group then requested the Secretariat to prepare draft provisions based on the discussions at that session. At the seventeenth session in July 1988, the Working Group considered the draft provisions and requested the Secretariat to prepare a revised draft of the Model Rules.[10] The Model Rules were again considered at the eighteenth session, where it was renamed the Draft Model Law on International Credit Transfers.[11] It was also decided that the Model Law would apply to both paper-based and electronic credit transfers. The Model Law was further considered at the nineteenth and twentieth sessions, of the Working Group in 1989.[12] At the close of the twentieth session, the United States ("US") delegation made a statement that it had great concern over the direction the Model Law project had taken.[13] When the work first began, there was the potential for the creation across the world of a single model law to govern high speed electronic funds transfers. The US had completed its own version of such a statute, namely, Article 4A of the Uniform Commercial Code ("UCC"). The differences between the two laws made it virtually inconceivable that the US would adopt both. The US delegation also thought that Article 4A of the UCC was a better law as it was drafted with a greater appreciation of commercial reality and relied upon the advice and guidance of those intimately involved in the workings of electronic funds transfers. It was less wedded than was the UNCITRAL model law to the traditions of the past. However, the US suggested the possibility of separating the Model Law into two parts – one applicable to electronic transfers and the other to slower paper-based systems.

In response to the US statement, it was stated that the Model Law project endeavoured to integrate the experience and objectives of all participating countries to establish minimum standards that will assist in the development of international credit transfers and reduce obstacles to international trade. It was noted that the laws of many participating States had contained provisions dealing with credit transfers for many years and that there existed considerable experience and jurisprudence. In contrast,

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[9] Report of the Working Group on International Payments on the Work of its 16th session, A/CN 9/297.

[10] Report of the Working Group on International Payments on the Work of its 17th session, A/CN 9/317.

[11] Report of the Working Group on International Payments on the Work of its 18th session, A/CN 9/318.

[12] Report of the Working Group on International Payments on the Work of its 19th and 20th sessions, A/CN 9/328 and 3.

[13] Report of the Working Group on International Payments on the Work of its 20th session, A/CN 9/3.

Article 4A of the UCC was new and as yet untested but the major role of the US in the international payments system was also recognised. The hope was expressed that all States would continue to participate in the Model Law project not with a view to enshrining national law concepts but reflecting them constructively in a useful new regime. As it turned out, the US continued to participate actively in the formulation of the Model Law. The draft Model Law was considered article by article at the twenty-fourth and twenty-fifth sessions of UNCITRAL and finally adopted at the twenty-fifth session in 1992.

B. *Article 4A of the UCC*

It would be appropriate at this juncture to touch briefly on Article 4A of the UCC. The US National Conference of Commissioners on Uniform State Laws and the American Law Institute approved a new Article 4A on funds transfers in May and August 1989 respectively. The approval of Article 4A took four years from the moment it was considered as an issue of its own (mid-1985). Since then it has been strongly endorsed by the American Bankers Association[14] and is now awaiting adoption by all the States. In fact, it has already been enacted by some legislatures[15] and is expected to be passed by the others without major opposition or changes in the near future. Article 4A is a comprehensive code consisting of 38 paragraphs divided into five parts on subject matter and definitions, issue and acceptance of payment order, execution of payment order by receiving bank, payment and miscellaneous provisions respectively.

The principal interest in Article 4A arises out of the fact that it is the only piece of legislation in existence that provides a basic legal structure for credit transfers. In other countries the law of credit transfers is derived from a multitude of sources.[16] Article 4A was not surprisingly the model on which the Model Law was based.

III. Salient Features of the Model Law

A. *Overview of Model Law*

It was said more than once at the twenty-fourth session that the Model Law dealt with private law rather than public law, *ie,* the governing of relations between parties such as banks as opposed to banking regulation.

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14 On 8 December 1989, the ABA Board of Directors urged the States to adopt Art 4A in an expeditious manner, 53 BNA's Banking Report 944 (1989).

15 Colorado, Kansas, Maryland, Utah, Virginia and West Virginia.

16 UNCITRAL; Comments on the Draft Model Law on International Credit Transfers; A/CN 9/346, 15 May 1991 at 4.

Basically, the Model Law deals with the allocation of risks for the reason that transfers of sometimes large sums of money are effected along the funds transfer chain.

It does so by specifying at which points a sender or receiving bank is bound by a payment order. Losses could occur through an error in data entry, a delay in transmission or even the fraudulent authorisation of a payment order. As the old saying goes, "time is money" and delay may mean incurring interest charges which can be substantial where huge sums are transferred. Interest is defined as the "time value" of the funds involved (Article 2). This American concept though unfamiliar to Singapore lawyers makes good sense as interest is the cost of holding funds and is calculated by reference to the effluxion of time.

The Model Law deals with the following issues pertaining to the different banks in the funds transfer chain:

(1) The obligations of the sender (Article 5). The sender is bound by the payment order and any amendment or revocation if issued by him or his agent. He is also bound by the terms of the payment order as received by the receiving bank and he is bound to pay the receiving bank.

(2) At which point of time payment to a receiving bank occurs (Article 6).

(3) Acceptance or rejection of a payment order by (a) receiving banks other than a beneficiary's bank (Article 7); and (b) by the beneficiary's bank (Article 9). The distinction maintained here is more than linguistic as the Model Law treats the beneficiary's bank differently from other receiving banks simply because it is the terminating point in the funds transfer chain. The obligation of receiving banks other than a beneficiary's bank is to issue a payment order. On the other hand, the obligation of the beneficiary's bank is to pay the beneficiary or credit his account.

(4) The time within which a receiving bank has to execute payment orders or give notices.

(5) Under-payment (Article 15) and over-payment (Article 16).

(6) Damages or liability for interest, the exclusivity of remedies (Article 18) and the definition of interest (Article 2).

(7) Beginning and completion of credit transfer (Article 19).

The important aspects of the Model Law will be discussed in the context of the following: structure of a funds transfer – a payment order; sphere of application; freedom of contract; high speed v paper-based transfers; netting agreements; money-back guarantee; authentication; and exclusivity of remedies.

B. *Some Aspects of the Model Law*

1. *Structure of a funds transfer*

In order to gain a proper understanding of the Model Law, it is necessary first to understand the structure of a funds transfer. Usually a funds transfer will originate with the payer (referred to in the Model Law as the "originator") who gives a payment order to his bank by instructing it to transmit a specified amount of money to the beneficiary's account. If the beneficiary's account is with the same bank, the originator's bank will execute the order by simply crediting the beneficiary's account and debiting the originator's account for the specified amount. As this is usually not the case, the originator's bank will have to execute the order by issuing a second payment order to the beneficiary's bank instructing it to credit the beneficiary's account for the same amount. The beneficiary's bank will in turn act upon this second order by crediting the beneficiary's account. The beneficiary's bank will cover itself when it credits the beneficiary's account by either debiting the originator's bank account with itself or by obtaining a credit on its own account with a third bank or on its reserve account with a Federal Reserve Bank. This process is called "settlement". Frequently in an international transfer, a settlement is not possible directly between the originator's bank and the beneficiary's bank because banks cannot maintain a correspondent relationship with all other banks. The transfer will then involve the use of several intermediary banks, each executing the payment order it receives from the preceding bank by issuing in turn a payment order to the next bank in the funds transfer chain. Each intermediary bank generates a new payment order and a new settlement. The resulting movement of money is a "credit funds transfer". Diagrammatically the chain can be depicted as follows:

Funds Transfer Chain

ORIGINATOR——> *issues payment order to*——> ORIGINATOR'S BANK ——> *issues payment order to* ——> 1st INTERMEDIARY BANK —> *issues payment order to* ——> 2nd INTERMEDIARY BANK ——> *issues payment order to* ——> BENEFICIARY'S BANK ———> *credits account of or pays* ——> **BENEFICIARY**

Under the Model Law, the credit transfer begins with the originator's payment order made for the purpose of placing funds at the disposal of a beneficiary. Article 2(a) defines a credit transfer thus:

> "credit transfer" means the series of operations, beginning with the originator's payment order, made for the purpose of placing funds at the disposal of a beneficiary. The term includes any payment order issued by the originator's bank or any intermediary bank intended to carry out the originator's payment order. A payment order issued for the purpose of effecting payment for such an order is considered to be part of a different credit transfer.

Although the funds transfer ends in reality when the beneficiary is paid or his account credited, the Model Law deems that it ends "when the beneficiary's bank accepts a payment order for the benefit of the beneficiary."[17] When the credit transfer is completed, the beneficiary's bank becomes indebted to the beneficiary to the extent of the payment order accepted by it. In order to avoid the possible interpretation that completion constitutes the discharge of the liability of the beneficiary's bank to the beneficiary, Article 19(1) specifically provides that "completion does not otherwise affect the relationship between the beneficiary and the beneficiary's bank". By way of comparison, the common law position is that the transfer is complete the moment the beneficiary's account has been credited with the payment. In addition, if the beneficiary has been informed of the transfer, the transfer becomes irreversible. This was decided by Webster J in *Royal Products Ltd* v *Midland Bank Ltd.*[18]

The foregoing discussion refers extensively to payment orders. What is a payment order? Lord Wilberforce said in *Mardorf Peach & Co Ltd* v *Attica Sea Carriers Corpn:*[19]

> A payment order is a document issued by one bank to another under a scheme (LCSS) by which banks maintain dollar suspense accounts in which they credit or debit each other with sums of dollars and make periodic settlements. As between banks, a payment order is the equivalent of cash, but a customer cannot draw upon it. The amount must first be credited to his account, but he can of course make special arrangements for earlier drawings.

The Model Law, however, contains its own definition of a payment order in Article 2(b) as follows:

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17 Art 19(1).
18 [1981] 2 Lloyd's Rep 194.
19 [1977] AC 850 at 870.

'Payment order' means an unconditional instruction, in any form, by a sender or a receiving bank to place at the disposal of a beneficiary a fixed or determinable amount of money if:

(i) the receiving bank is to be reimbursed by debiting an account or otherwise receiving payment from the sender, and

(ii) the instruction does not provide that payment is to be made at the request of the beneficiary.

Nothing in this paragraph prevents an instruction from being a payment order merely because it directs the beneficiary's bank to hold, until the beneficiary requests payment, funds for a beneficiary that does not maintain an account with it.

The first deduction one can draw from the definition is that it specifies the minimum data elements required in a payment order. Secondly, any reference to the particular form of the order was deliberately avoided in order to accommodate new technological advances. Thirdly, the definition would exclude conditional payment orders from the scope of the Model Law.

2. *Sphere of application*

The title of the Model Law reflects several policies adopted by the Commission. First, it is a Model Law for use by national legislators and the text should for the time being not be in the form of a convention. This may appear deceptive as the intention is for sufficient States to adopt the Model Law for it to be a workable harmonisation of laws on international credit transfers. Like the UNCITRAL Model Law on International Commercial Arbitration, this Model Law seeks to achieve uniformity of laws on a global basis by getting sufficient countries to adopt it as part of their municipal laws. It thereby hopes to exert what Bradley Crawford calls an educational and harmonising influence.[20]

The second point which is apparent from the title is that the Model Law applies only to "international" transfers. Article 1(1) provides that the "law applies to credit transfers where any sending bank and its receiving bank are in different states." Article 1(2) further provides that "branches and separate offices of a bank situated in different States are considered as separate banks." The legal phenomenon that the head office of a bank and

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[20] Bradley Crawford, "International Money Transfers" in *Current Developments in International Banking and Corporate Financial Operations* (KL Koh *et als,* 1989), at 26.

its branch in another foreign country are one and the same legal entity has caused a number of anomalies in the financial world. It has tax and regulatory implications because of the territorial scope of tax and banking legislation in Singapore. The Model Law neatly avoids these complications by treating the branch as a separate bank. Thirdly, the words "credit transfer" in the title make it clear that the law applies only to "credit transfers" and not "debit transfers".[21]

It is also apparent from the absence of the word "electronic" in the title that it is also applicable to paper-based funds transfers. This was a decision made in the Working Group and endorsed by the Commission. A full discussion of this issue is contained in the discussions below on "high-speed v paper-based" transfers.

Article 1 also contains a footnote that the Model Law does not deal with consumer protection issues. In the US, there is separate legislation to deal with consumer protection, *viz,* the Electronic Fund Transfers Act 1978.

3. *Freedom of contract*

Article 4 of the Model Law recognises the freedom of the parties to vary their rights and obligations by agreement except where the Model Law provides otherwise. Party autonomy, that "war cry" of champions of international trade, is thereby preserved. Article 4 states as follows: "Except as otherwise provided in this law, the rights and obligations of parties to a credit transfer may be varied by their agreement."

Prohibitions against variation can be found in Articles 14(2) (refund and money-back guarantee) and 17(7) (liability for interest).

4. *Limits of the Model Law*

The Commission recognised that the Model Law is unable to deal with specific issues which are best left to the applicable law governing the funds transfer. In particular, the Model Law does not govern the relationship between the beneficiary and the beneficiary's bank. In other words, the Model Law does not deal with the underlying transaction between the parties. In these circumstances, the Model Law uses the expression "as may otherwise be provided by law." The expression in this context refers to the applicable law determined by the rules of the conflict of laws. In the Singapore context, restitutionary, contractual and tortious remedies founded in common law will be relevant. In *Libyan Arab Foreign Bank*

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[21] See art 1(1).

v *Bankers Trust Co,*[22] it was decided by Staughton J that a bank which failed to carry out the instructions of a customer to make a transfer of funds was in breach of its contract with its customer.

The Model Law applies to credit transfers which are briefly described above. It excludes "debit transfers". This was one reason why an explicit reference to the fact that the Model Law excludes "point of sale" ("POS") transactions was deleted at the twenty-fourth session. It was thought to be superfluous because "POS" transactions are debit transfers. One example of "POS" in Singapore is our "NETS" system using an "ATM" card. The system utilises a dual means of authentication by the use of an ATM card together with the "PIN" (Personal Identification Number).

In a debit as opposed to a credit transfer, the beneficiary originates the transfer by issuing a "debit" (a "draw" as opposed to "pay") order to his bank, instructing it to collect a sum of money. The order is transmitted in the exact reverse order of a credit transfer to the payer's bank. If the order has been accepted by the payer and covered by sufficient credit in the payer's account, the payer's bank will settle the order. This payment will be transmitted all the way back to the beneficiary's account.[23] In the US, electronic debit transfers are processed through automated clearing houses. GIRO payments in Singapore are a form of debit transfers. So are credit card, bill of exchange and cheque payments.

5. *High-speed electronic transfers* vs *low-speed paper-based transfers*

The Model Law first began as a project on Electronic Funds Transfers but evolved mid-stream into a Model Law encompassing all international credit transfers including slower paper-based systems. The US delegation was concerned that this direction would hinder the operation of electronic transfers systems such as Fedwire, SWIFT and CHIPS. The US consequently issued the statement referred to above but at the end of the day agreed to continue participating in the work on the Model Law.

At the twenty-fourth session of UNCITRAL in 1991, the US delegation again suggested that the Model Law should be limited to electronic transfers and thus be geared to high-speed, high-value credit transfers. They argued that the significance of the difference lie not only in their speed, with its consequences on time-periods and notice requirements but also in the value and volume of computer-assisted transfers that created a totally different operating environment, with funds transfer systems acting as central data managers. The US delegation painted the graphic

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[22] [1988] 1 Lloyd's Rep 259.

[23] See the UNCITRAL Legal Guide at 7, 14, 29-32 and 75-76.

analogy of the difference between a motor car driving along a motorway and a bicycle proceeding slowly and steadily with more than adequate time for checking, notifying and so forth.

The Commission, however, did not accept the suggestion for the same reasons that had prevailed in the Working Group, *viz,* the difficulty of distinguishing clearly between electronic and other transfers, taking into account the fact that a given credit transfer may comprise segments of both types of communications; the difficulty of defining clearly what high-speed, high-value transfers are; and the inappropriateness of expressing a preference for one technology over others in a rapidly developing area. It was pointed out that, where special features of certain credit transfers called for different rules, the provisions of Article 4 on variation by agreement were of particular importance, especially in inter-bank relationships.

Despite the Commission's decision, the US delegation throughout the session continued to highlight the operational difficulties that may be caused by certain provisions to electronic transfer systems, such as SWIFT and CHIPS. Singapore generally sympathised with and supported the US position as our banking industry is, like the US's, highly computerised with the SHIFT system.

6. *Netting agreements*

Considerable discussion centred on the developments on "netting" which was regarded as the banking direction of the future. Settlement is the process by which banks ultimately pay the claims they have against each other arising from their exchange of payment instructions. If the claims are netted before being settled, the process is called "clearing". The central bank or a major bank in an international financial centre may act as a settlement bank. The "Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries" was published in November 1990.

The Report dealt with policies in regard to Interbank Netting Schemes including payment netting schemes but it did not attempt to draft any legal text to implement its policy decisions. The Report sets out minimum standards for netting schemes. The first of these minimum standards was that "netting schemes should have a well-founded legal basis in all relevant jurisdictions." At the twenty-second session of the UNCITRAL Working Group on International Payments, it was noted that for there to be a well-founded legal basis for netting schemes, it is necessary that the scheme be valid not only under the civil or commercial law but also under insolvency law. In Part C of the Report of the Committee on Netting Schemes, it was indicated that the netting scheme would have to function as intended under the laws of all relevant States which included:

(a) the law of each of the parties to the netting scheme;
(b) the law that governs the individual transactions subject to the netting scheme; and
(c) the law that governs any contract or agreement necessary to effect the netting.

The Working Group also decided to recommend to national legislators that domestic laws, especially laws dealing with bankruptcy and insolvency, should be reviewed with the objective of interbank netting of payment obligations.[24] The US and the Bank for International Settlements asked particularly that reference in the Model Law should as far as possible avoid undue references to "netting" as it was feared that such references might prejudice the rights and obligations of parties to netting agreements. This was stated in the context that the legal basis for netting agreements was not well established and the details of such agreements had not been fully considered by the Commission. In certain parts of the Model Law, oblique references are made to netting by the use of the phrase "rules of a funds transfer system". Users of the Model Law may be heartened to learn that this cryptic phrase was intended to refer to netting agreements,

7. *Money-back guarantee*

(i) *The bargain struck*

Article 14 contains one of the most important rules in the Model Law. If the credit transfer is not completed in accordance with Article 19(1), the originator has a right to a refund of any payment it has made to the originator's bank. A consequential rule is that the originator's bank and each subsequent receiving bank is entitled to the return of any funds it has paid to its receiving bank. A typical reason why a credit transfer cannot be completed is that one of the senders in the credit transfer chain has revoked the payment order.

The most contentious point of this provision is that it is mandatory and not subject to any variation by agreement under Article 4. Hence a bank would not be able to "contract out" of this provision. An argument against the mandatory rule is that it would amount to "insurance" by the originator's bank and would consequently increase the cost of payment orders. This would be particularly so where the originator specified that the credit transfer was to be carried out through a particularly unreliable intermediary bank or unstable country. Concerns were also expressed that the money-back

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[24] Comments on the Draft Model Law, Report of the Secretary-General A/CN 9/346 at paras 3 & 4.

guarantee was incompatible with banking practices in a number of countries. The US and the United Kingdom ("the UK") delegations, however, stressed that the money-back guarantee was the important "bargain" that was struck as a trade-off to balance the other provisions that leaned in favour of banks especially in the case of high-speed, high-volume electronic transfers.

In trying to reach a compromise, the Chairman of the twenty-fourth session, Professor Kazuaki Sono of Japan,[25] proposed that Article 14 be amended to allow variation by agreement where "a prudent originator's bank would not have otherwise accepted a particular payment order because of a significant risk involved in the execution of the payment order." However, Germany, Switzerland and a number of other countries proposed a two-tier system. Transfers may be varied if the receiving bank has offered to the originator to accept the payment order and the duty to refund. In other words, in the discussions there was one group led by Germany which sought to widen the exception and another group which sought to narrow the exception to "exceptional circumstances". The prevailing view, however, was to accept the Chairman's proposal as a compromise.

(ii) *The "Skip" Rule*

The UK also proposed an amendment to Article 14(4) known as the "skip rule" which allowed a bank obliged to make a refund to make it to a prior sender. The US opposed this proposal on the basis that it was tried out in CHIPS and found unworkable in relation to the drafting of a similar provision in Article 4A of the UCC. On the other hand, the British proposal was intended to allow a bank to "skip" an insolvent bank and direct the refund to the prior sender who can then pass it down the chain to the originator. The UK also clarified that the original intention of the money-back guarantee was to provide a convenient means for the sender to get his money back from his bank in his own country rather than face the daunting prospect of pursuing restitutionary remedies against an intermediary bank in another country.

8. *Authentication*

(i) *Authenticating an electronic transfer*

Other than speed, the main difference between an electronic funds transfer and a paper-based transfer is the absence of any hand-written signature or seal carrying the authorisation of the person who issues a payment order.

[25] Prof K Sono of Hokkaido University was formerly Secretary of UNCITRAL.

The transient nature of the electronic data transmitted also means that any unauthorised alteration can only be detected by an electronic means of verification with possibly an electronic audit trail. Article 5 of the Model Law adopts the approach of stating the general principle of agency in paragraph (1) that "a sender is bound by a payment order or an amendment or revocation of a payment order if it was issued by him or by another person who had the authority to bind the sender." Any definition of "authority" was carefully avoided as the Commission did not wish to venture into the difficult area of the law of agency. It thought that this would be best left to the applicable law to determine. Hence, the opening paragraph deals with a payment order or revocation thereof which was "authorised". Paragraph (2) goes on to deal with an unauthorised "payment order which was nevertheless subject to authentication other than by means of a mere comparison of signatures." The person who is purported to have sent the order is bound if –

(a) the authentication provided is a commercially reasonable method of security against unauthorised payment orders, and
(b) the receiving bank complied with the authentication.

The parties cannot vary the requirement under this provision that the authentication must be commercially reasonable. The meanings of a few key words – "authentication" and "commercially reasonable" – are obviously important.

(ii) *Meaning of "authentication"*

Although "authentication" is defined in Article 2, the Model Law wisely leaves the actual method of authentication to the banks. It only requires that it be a commercially reasonable method of security against unauthorised payment orders. The definition as one can see, though wise, is not very illuminating:

> "Authentication" means a procedure established by agreement to determine whether a payment order or an amendment or revocation of a payment order was issued by the person indicated as the sender;....

In practice, authentication can range from making a telephone call to verify a telex to a sophisticated system of passwords and PIN numbers in an electronic funds transfer system. POS and ATM systems use both the PIN number as well as the ATM card as double verification whereas Phone Bank uses only the account number and the secret personal code number. Another traditional form of authentication is the comparison of a hand-written signature with a specimen signature. However, at the twenty-fourth session of UNCITRAL it was decided that the Model Law should follow the traditional rule that a sender did not bear the risk of a forgery. As a result of that decision, comparison of signatures would only be applicable to paragraph (1).

(iii) *What is "commercially reasonable"?*

The expression "commercially reasonable" was borrowed from UCC Article 4A which leaves it undefined. The Commission acknowledged that it was a term which was not established in any legal system. However, it felt that it was best for the courts of individual jurisdictions to evolve their own standards of what was commercially reasonable. On the one hand, several delegations felt that the expression was too vague a standard for measuring the adequacy of authentication procedures. On the other hand, the US and German delegations felt that banks should not be unduly tied to an uncertain standard and should have total freedom of contract to determine their standards of authentication. The writer is of the opinion that the standards would have to be measured against what is reasonable to expect in the commercial world having regard to prevailing banking and commercial practices. In other words, the court need only decide what is reasonable in the commercial banking world. As one banker on the US delegation constantly reminded the Commission, one has to keep in sight what happens in the "real world".

9. *Exclusivity of Remedies*

Article 18 provides that the remedies in Article 17 (liability to pay interest) are exclusive and no other remedy arising out of other doctrines of law shall be available in respect of non-compliance with Article 8 or 10. Article 8 deals with the obligations of a receiving bank other than the beneficiary's bank. Article 10 deals with the obligations of the beneficiary's bank. These limits of liability can, however, be broken where a bank has improperly executed, or failed to execute, a payment order –

(a) with the specific intent to cause loss; or
(b) recklessly and with actual knowledge that loss would be likely to result.

These limits of liability arose as a result of the fear that banks should not be exposed to liability for huge consequential damages (particularly for loss of profit) in respect of relatively small transfers and in return for small bank charges. The words "specific" in paragraph (a) and "actual" were inserted at the twenty-fifth session of UNCITRAL as a further attempt to restrict the circumstances where the limits can be broken. It was also said that the exclusivity of remedies was a trade-off for the agreement to include provisions such as the money-back guarantee which increased the risk exposure of banks. A distinction should be made that Article 18 only applies to liability under the Model Law and not in respect of the underlying transaction. An interesting question which may arise is whether Article 17 will preclude a court from making interim or interlocutory injunctions such as a *mareva injunction* or an interim injunction to stop a particular funds transfer or even an order for security for costs. The writer's view is that Article 17 is intended to apply to the final remedies awarded by a court and not intended to curb the powers of the court to make necessary interim orders in the course of court proceedings. Moreover the exclusivity applies only to actions for breach of Article 8 or 10 and not to actions founded on other grounds such as breach of contract.

10. *Singapore SHIFT*

Is the Model Law of any particular relevance to Singapore? Like the US, banks in Singapore effect funds transfers through an electronic funds transfer system called SHIFT. SHIFT is the acronym for the *System for Handling Interbank Funds Transfers* which is a computer network for processing of credit transfers in Singapore Dollars (S$). Computers located in individual banks are linked to a central computer which is operated by a private vendor, Banking Computer Services Pte Ltd (BCS).

Singapore Dollar interbank transfers are made in the following manner:

(a) The paying bank enters a credit transfer instruction on its SHIFT computer and transmits it to the SHIFT central computer.

(b) The SHIFT central computer records the credit transfer instruction and sends a copy to notify the receiving bank.

(c) At the end of each business day, BCS would electronically submit to the Monetary Authority of Singapore (MAS) a statement of the total value of credit transfers issued as well as received by each bank.

(d) Every bank in Singapore maintains a current account with MAS. The credit transfers issued by banks are paid by drawing down the balances of the paying banks with MAS while the receiving banks are paid by credits into their current accounts maintained with MAS. The MAS performs the settlement process using the statement submitted by BCS. Everyday MAS issues a statement of accounts to each bank.

The Singapore Clearing House Association (SCHA), an association comprising all banks in Singapore, has appointed BCS to provide the SHIFT services. Under an agreement with SCHA, BCS is to provide the SHIFT services to members of the association according to the terms set out in the SHIFT Bye-Laws. Banks that wish to utilise the SHIFT services have to individually enter into a contract with BCS which also incorporates the SHIFT Bye-Laws into the agreement. The Bye-laws also set out the rights of member banks *inter se.*

It is stated in MAS Notice to Banks No 710 that for the settlement of banks' positions at the end of each day, MAS will effect debits and credits as indicated in the settlement advices provided by BCS. MAS has requested all banks through the notice to give MAS the authorisation to carry out such debiting and crediting. What if the SHIFT central computer is down? The MAS Notice 710 also prescribes rules for the manual back-up system for SHIFT which involves the manual submission to MAS of credit instructions forms.

IV. CONCLUSION

The Model Law has a good chance of succeeding as a uniform law for credit transfers. Not only because it is the work of UNCITRAL, with its wide and scholarly representation, but also because it came into being at the pre-unification stage when no country in the world, other than the US, has a comprehensive piece of legislation governing funds transfers. Given this void, any country that wishes to enact such legislation cannot afford to ignore the Model Law. The impetus will grow stronger once the European Community adopts the Model Law in an EC Directive. Representatives from the Group of Ten took active part in the deliberations on the Model Law. The German delegation informed the Commission that the intended creation of a single internal market in the European Community would eliminate the distinction between cross-border and domestic transactions within the Community. The possibility of issuing an EC directive incorporating the Model Law was under discussion. In that event, all transfers within the Community would be subject to the Model Law.[26] Hence, if the text is acceptable to the US and the EC, it will have the effect of applying to a majority of the largest banking nations in the world. Rather than unifying diverse existing national laws, it is hoped that it will become the "mother" of all credit funds transfers legislation.

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[26] A/CN 9/SR 439 at para 20.

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