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## Report on Global Custody Risks

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# Table of Contents

	Page
<b>Executive Summary</b> .....	<b>4</b>
<b>1. Introduction</b> .....	<b>5</b>
1.1 Background.....	5
1.2 Mandate .....	5
1.3 Scope of Report.....	5
<b>2. Definitions</b> .....	<b>6</b>
2.1 Global Custodian.....	6
2.2 Main Types of Risks .....	7
<b>3. Service Related Risks</b> .....	<b>9</b>
3.1 Trade- and Settlement-related Risks.....	9
3.2 Safekeeping Services Risks .....	10
3.3 Other Operational Risks.....	12
3.4 Collateral Credit Risks.....	13
3.5 Securities Borrowing/Lending Risks .....	14
3.6 Custody Risks Associated with Derivative Products .....	15
<b>4. Relationship Risks</b> .....	<b>16</b>
4.1 Relationship with Clients .....	16
4.2 Relationship with Investment Managers.....	17
4.3 Relationship with Sub-Custodians.....	19
<b>5. Communication Risks</b> .....	<b>23</b>
<b>6. Conclusions</b> .....	<b>25</b>
<b>7. Recommendations</b> .....	<b>26</b>
 <b>Annexes</b>	
1 ISSA 5 Recommendation Number 7 .....	27
2 Terms of Reference for Working Group 3 (WG 3)/Risks .....	28
3 Composition of WG 3 .....	29
4 Model Subcustodian Agreement .....	30

## Executive Summary

A growing number of market participants venture into markets which are new to them. There is an obvious danger that some of the associated risks are ignored or underestimated. This study attempts to provide guidance to market participants on how to minimize loss and will thus, hopefully, contribute to the further growth of cross-border investments. The study deliberately focuses on risk encountered by a typical global custodian, defined as "providing clients with multi-currency custody, settlement and reporting services which extend beyond the global custodian's and client's base region and currency, and encompasses all classes of financial instruments".

The main types of risks are related to the nature of the business, the country invested in, the counterparties involved, credit, liquidity, the market conditions, operational hazards, settlement, systemic and transfer risks.

A detailed breakdown of key operational risks is presented in tabular form with suggested countermeasures. These countermeasures emphasize strong internal controls, checks and balances, good contracts, and well trained professional staff. They are, of themselves, neither surprising nor difficult. Their value is in highlighting the extent to which these practices must be in place at every step in both the global and sub-custodial operations, to ensure an effective and relatively low risk environment.

A third section discusses the relationship between global custodians and their clients as well as with investment managers and subcustodians. These are pre-eminent relationships, usually contractually based, and have their unique exposures related to liability, damage claims, credit risk, country risk and transfer risk. Countermeasures to these exposures are to be specified primarily in contracts, in good documentation or service agreements. Professional information, as can be found in the ISSA Handbook or in financial reports from various countries, will also be helpful.

In conclusion, it is recognized that while there are a great number and variety of risks to which parties involved in global custody can be exposed, these risks can be managed. However, special care and attention is required in emerging markets where the technological infrastructure, the market systems or the regulatory framework may still be weak. A global custodian must be able to accurately assess and differentiate the extent of exposure especially in those markets where specific countermeasures cannot be taken. The implementation of the Group of Thirty's recommendation is fundamental to risk containment in all financial centers.

While non-credit risk does not appear to attract special capital requirements, it is recommended that global custodians and subcustodians maintain a fee structure based on both transaction volume and on asset value in order to be able to absorb not only losses related to the ordinary business, but also any extraordinary, asset value-related liabilities.

## 1. Introduction

### 1.1. Background

During the last few years, the international diversification of portfolio investments - particularly by institutional investors - has constantly increased and now reaches very substantial amounts. Several hundred billion US dollars worth of foreign securities are now being held by global custodians on behalf of clients, mainly through subcustodians in the respective home markets. This trend is generally expected to continue, despite - or because of - the high volatility of stock prices and foreign exchange rates, which calls for risks to be spread.

As a result of these developments, a growing number of market participants venture into markets which are new to them. There is an obvious danger that some of the associated risks are ignored or underestimated. Therefore, it seems appropriate that experienced securities administration professionals provide an overview of the risks encountered by a typical global custodian and of possible protective measures for the benefit of clients, investment managers and custodians.

### 1.2 Mandate

At the close of the 5<sup>th</sup> Symposium (ISSA 5) in May 1990, participants voted and agreed upon 12 specific recommendations. Recommendation No. 7 (see Annex 1) called for *a study defining the types and nature of risks associated with global custody*. Moreover, it was recommended that ISSA should act as the distributor of work undertaken in different markets with a view to improving the international understanding of such risks. The areas to be addressed include credit, operational, technical, communication and legal risks.

This report is the result of a study which was carried out from September 1990 till August 1991 by a working group of securities industry experts (composition: see Annex 2).

The structure, the methods applied and the findings of the study reflect the unanimous or majority views of the working group members. The ISSA Executive Board has taken note of the report and will submit it to the participants of the ISSA 6 Symposium to be held in May 1992 for discussion, possible changes or improvements, and eventual endorsement. The ISSA Executive Board will then make the report publicly available. The Executive Board wishes to thank all contributors, in particular all members of the working group, for their excellent work. Hopefully, the publication will further the understanding of global custody risks, and assist private and institutional investors as well as investment managers and custodians in protecting themselves by using the procedures best suited for their specific needs.

### 1.3 Scope of the Report

This report does not deal with all types of risks confronting investors and custodians. It deliberately focuses only on risks encountered by a typical custodian. Accordingly, the chapters below are structured as follows:

- Definitions
- Service-related risks
- Relationship risks
- Communications
- Conclusions and recommendations

In this way, each party involved in global custody business should be able to recognize and understand the risks most relevant to it.

## 2. Definitions

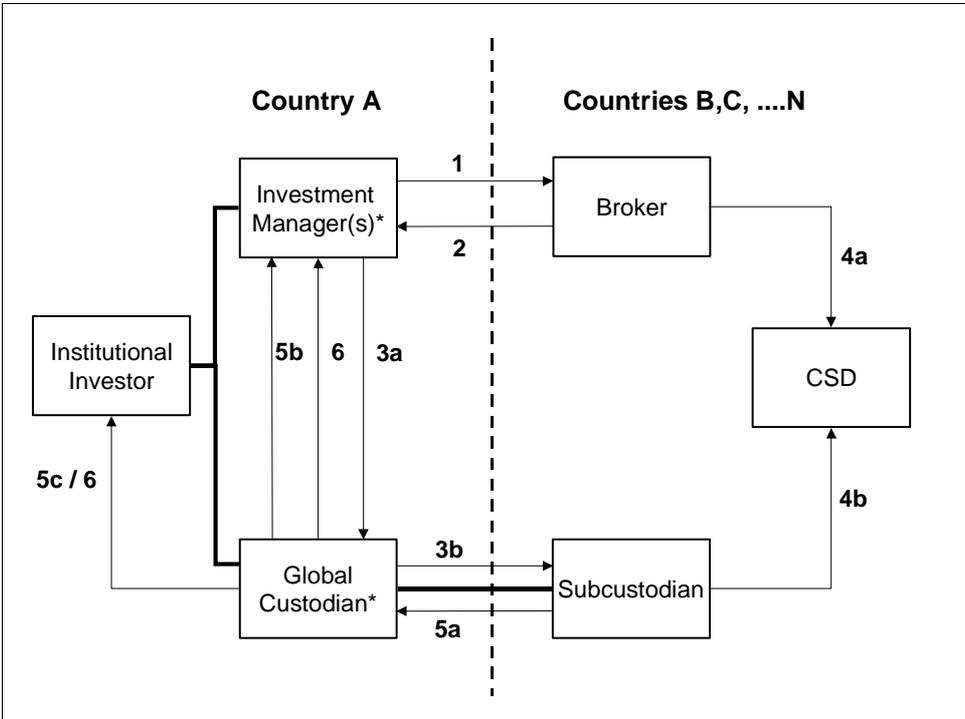
### 2.1 Global Custodian

As outlined above (see 1.3), all observations are made from the perspective of a custodian. A "global custodian" was defined at the ISSA 5 Symposium in May 1990 as follows:

"A global custodian provides clients with multi-currency custody, settlement and reporting services which extend beyond the global custodian's and client's base region and currency; and encompass all classes of financial instruments."

The illustration below shows which parties are generally involved in global custody services and how they communicate with each other:

**Global Custody Relationships and Communications**



Legend:

- 1 = Stock exchange order
- 2 = Advice of execution of stock exchange order
- 3a + b = Settlement instructions
- 4a + b = Settlement instructions and movement of funds
- 5a, b, c = Advices of execution of settlement
- 6 = Periodic statements for reporting purposes
- CSD = Central Securities Depository
- \* = may be domiciled in a country other than that of the institutional investor
- bold line = Standing Agreements / Standing Instructions may be in place

The services of a global custodian comprise:

- the safekeeping of securities
- the maintenance of multi-currency securities and funds accounts
- the settlement of securities trades in domestic and foreign markets, free of or against payments
- the collection of interest, dividends and principal due for redemption on due date
- the exercising or selling of subscription rights and attending to other corporate actions as well as pending fails
- the reporting of transactions completed and the periodical delivery of hardcopy statements of account
- contractual or actual settlement date accounting
- terminal or computer-to-computer link to pass on instructions and retrieve client information from the custodian's data base
- customized multi-currency reporting and performance information
- securities borrowing and lending
- assistance with tax claims
- handling/settlement of derivatives
- briefings on specific countries, in particular on emerging markets
- cash projection and cash management.

## 2.2 Main Types of Risks

The following is a list with definitions of the main types of risks to be distinguished in global custody:

Business Risk	Also referred to as Competitive Risk, means risk of losing clients' business (and subsequently critical mass of asset value or transaction volume) e.g. due to pressure on margins, innovation, new laws. If the income erosion happens faster than costs can be reduced, business may become unprofitable and will have to be abandoned.
Counterparty Risk	Risk of non-fulfillment of a trade contract due to inability or unwillingness. It is mainly a credit risk and can also include market risk. In certain markets, counterparty risk in broker-to-broker deals is assumed by a third party.
Country Risk	Risk connected with holding assets in a foreign country, e.g. political, economic, fiscal and legal changes, or gaps in supervisory coverage. (See also Transfer Risk).
Credit Risk	Risk that a counterparty will fail to deliver or pay in full on due date (or with accrued interest if delayed) or be liquidated or go bankrupt.
Liquidity Risk	Risk that settlement of an obligation will not be made on due date, but on some unspecified date thereafter.
Market Risk	Risk arising from market price fluctuation (volatility) of securities and currencies from the time of trade execution to eventual settlement. Also called Market Price Risk (or Position Risk, if related to a given long or short position).
Operational risk	Risk of loss due to clerical errors, organizational deficiency, delays, fraud, system failure, misperformance, non-performance by third party service providers, and similar incidents.

Settlement Risk	Risk that a party will default on one or more delivery or payment obligations to its counterparties or to a settlement agent.
Systemic Risk	Risk that the inability of one institution to meet its obligations when due will cause other participants or financial firms to be unable to meet their obligations when due (chain reaction).
Transfer Risk	Risk that a country will introduce exchange controls which will not allow for conversion of local into foreign currency and transfer of the proceeds abroad (e.g. for the settlement of outstanding foreign exchange obligation).

### 3. Service-related Risks

In view of the enormous diversity of the risks connected with global custody operations, chapters 3, 4 and 5 below have been structured in a pragmatic way: First, service-related risks are dealt with, and a distinction has been made between trade and settlement activities, safekeeping functions and other types of operational services. The next two chapters are devoted to specific risks associated with contractual relationships (with clients, investment managers or subcustodians) and data communication respectively. This approach has been chosen on the assumption that a description of specific business situations, combined with suggested countermeasures to avoid or contain the risks concerned, would be more helpful to securities industry practitioners than a purely theoretical presentation of the risks involved. Naturally, the list of the potential causes for risk exposure is not exhaustive and their order does not reflect any weighting or importance. Therefore, every professional should go through all lists of specific risks and check them against his or her environment to make sure no exposure goes unnoticed.

#### 3.1 Trade- and Settlement-related Risks

Cause	Exposure	Countermeasures
Trade data information arrives late	Debit interest, FX-risk, market risk	<ul style="list-style-type: none"> <li>Agreed operating procedures (deadline, message standard)</li> <li>Electronic communication link between investment manager and custodian</li> </ul>
Lack of capability to verify instructions from investment manager	Debit interest, FX-risk, market risk, fraud	<ul style="list-style-type: none"> <li>Timely pre-matching of settlement instructions with counterparty, directly or preferably through clearing organization</li> <li>Standardized, automated and electronic data flow between all parties involved</li> </ul>
Pricing feeds outdated or inaccurate	Damages claim	<ul style="list-style-type: none"> <li>Use more than one information service, run exception lists, review exceptions</li> <li>Check price variations against previous period or country index</li> <li>Check "off-exchange" prices against contracts</li> </ul>
Pricing of unlisted securities (e.g. unit trust, mutual funds) outdated or incorrect	Damages claim	<ul style="list-style-type: none"> <li>Check periodically if price outdated</li> </ul>
Incorrect cash position and/or accruals	Debit interest or damages claim	<ul style="list-style-type: none"> <li>Daily reconciliation of all cash accruals. Process should be automated.</li> </ul>
Delivery versus Payment (DVP) not available in clearing organization	Credit risk, market risk	<ul style="list-style-type: none"> <li>Intra-position of first class bank to ensure DVP</li> <li>Apply actual settlement date accounting. If contractual settlement date accounting is required, obtain collateral to reverse entries if necessary.</li> </ul>
Transaction with failing counterparty	Credit risk, market risk	<ul style="list-style-type: none"> <li>Client bears broker performance risk, risk exposure should be reviewed permanently</li> <li>Periodical analysis of fails to be sent to client.</li> <li>Use, if possible, clearing organization which assumes counterparty risk (by novation of contract and substitution for counterparty).</li> </ul>

<b>Cause</b>	<b>Exposure</b>	<b>Countermeasures</b>
Invalid authorization of instructions	Debit interest and market risk, fraud	<ul style="list-style-type: none"> <li>It is necessary to maintain accurate and up-to-date documentation as to who is authorized to give instructions. No instructions should be acted upon unless they carry valid signatures, testkeys or other agreed security procedures. Signed instructions transmitted by fax are not a safe method, unless a testkey is supplied.</li> </ul>
Late or erroneous payment or delivery by third party	Debit interest or market risk	<ul style="list-style-type: none"> <li>Initiate prompt compensation claim on third party</li> <li>Follow-up claims within standard time frames</li> <li>Check value dates, submit differences to management</li> </ul>

### 3.2 Safekeeping Services Risks

<b>Cause</b>	<b>Exposure</b>	<b>Countermeasures</b>
Insufficient funds or advised money transfer in local currency does not arrive in time	Credit risk, market risk	<ul style="list-style-type: none"> <li>Setting day/intra-day credit limit and checking that it is not exceeded</li> <li>Contact client or investment manager</li> </ul>
Insufficient funds or advised money transfer in foreign currency does not arrive in time	Credit risk, market risk, FX risk	<ul style="list-style-type: none"> <li>Setting intra-day or overnight credit limit and checking that it is not exceeded</li> <li>Contact client or investment manager</li> </ul>
Unintended debit or credit balance on Nostro account	Debit interest and credit risk	<ul style="list-style-type: none"> <li>Reconciliation of correspondent's and own entries, of balances and open items, based on value date</li> <li>Ongoing and continuous reporting of cash projections</li> </ul>
Incorrect, duplicated or late reporting to client or investment manager	Debit interest and damages claim	<ul style="list-style-type: none"> <li>Reconciliation at short intervals of predicted with actual positions</li> <li>Improve reporting system</li> </ul>
Mis-reconciliation of Nostro items (securities and/or funds)	Debit interest, FX risk	<ul style="list-style-type: none"> <li>Daily review of matched items, speedy investigation of outstanding items</li> <li>Systematic checking of outstanding Nostro items within predetermined time frames</li> <li>Monthly reports of outstanding Nostro items by agent bank for management review</li> </ul>
Corporate action not noticed or not processed	Market risk	<ul style="list-style-type: none"> <li>Use more than one information source</li> <li>Instruct subcustodians to advise all corporate actions</li> <li>Consult relevant financial press, newsletters, bulletins, etc.</li> </ul>

Cause	Exposure	Countermeasures
Lack of reliable source of timely dividend and corporate actions information (including subscription rights, drawings of bonds, premature redemption of entire issues, exercise or sale of expiring warrants, put-options, etc.)	Market risk, debit interest and damages claim	<ul style="list-style-type: none"> <li>• At least two independent information sources should be available (e.g. subcustodian, newsletter, bulletins, financial press, etc.)</li> <li>• It is recommended that pricing comparison with the previous be run daily to identify large market movements which could signal that a corporate action announcement has been made but not picked up</li> <li>• Wherever possible the local financial press should be reviewed for notices and advance notices of any actions</li> <li>• The subcustodian in each country should be responsible for providing such information in a timely and comprehensive manner</li> </ul>
Delayed income collection and unforeseen tax rate changes	Debit interest, FX risk, non-recoupable erroneous credits	<ul style="list-style-type: none"> <li>• Dividend, interest and redeemable principal should only be credited on due date if timely payment by the issuer is to be expected. The credit advice or the custody contract should provide that a credit can be reversed in whole or in part if the funds are not actually received or if suddenly a higher than expected tax is withheld at source</li> <li>• Changes in tax laws and the situation of issuers confronted with debt problems should be followed closely</li> </ul>
Incorrect or non-execution of client's instructions	Debit interest, market risk, FX risk and damages claim	<ul style="list-style-type: none"> <li>• "Four-eyes principle" (Checking by another person)</li> <li>• Forward-value payment or delivery instructions to be held in a diary system, reviewed daily</li> <li>• Daily checking of debit and credit balances of client's account with respect to plausibility</li> </ul>
Clerical errors	Debit interest and/or damages claim, credit, FX and market risk	<ul style="list-style-type: none"> <li>• Organizational precautions (procedures with built-in controls) are necessary to avoid double payments, payment to wrong beneficiaries, misinterpretation of instructions, the non-execution of transactions, excessive deliveries, etc. (plausibility test, "four-eyes principle", etc.)</li> </ul>
Storage of invalid or forged certificates	Liability to procure authentic replacement	<ul style="list-style-type: none"> <li>• Careful checking of incoming items by experienced personnel</li> <li>• Check list of stolen/lost securities</li> </ul>

### 3.3 Other Operational Risks

Cause	Exposure	Countermeasures
Theft of physical certificates, acts of burglary	Market risk, damages claim, damage to reputation	<ul style="list-style-type: none"> <li>• Internal control procedures should lead to prompt discovery of missing certificates</li> <li>• Solid vaults and limitation of access to securities are a deterrent to acts of burglary</li> <li>• Insurance coverage will limit losses due to lost or stolen securities</li> </ul>
Fraudulent acts by personnel	Financial loss and damage to reputation	<ul style="list-style-type: none"> <li>• As above and supplementary checks by internal auditors</li> </ul>
Loss of securities in transport	Market risk	<ul style="list-style-type: none"> <li>• Shipments should be made only in armored vehicles by specialized firms or by registered mail, with appropriate insurance cover.</li> </ul>
Substantial float credit balances held with agents who do not pay credit interest may give rise to a risk of not maximizing income from the use of "idle" balances	Damages claim, credit risk	<ul style="list-style-type: none"> <li>• Negotiating with agent to pay interest on float or compensate against custody fees.</li> <li>• Placing monies with approved third parties who pay interest.</li> </ul>
Inability to cope with variable and cyclical volumes	Loss due to work overload, market risk, FX risk and damages claim	<ul style="list-style-type: none"> <li>• EDP system, organization and manpower must be able to cope with sudden increases in the workload. A high degree of automation usually provides a higher flexibility with respect to changing workload.</li> <li>• Stable and experienced personnel will help absorb sudden volume increases</li> </ul>
Power cuts or prolonged EDP system downtime	Debit interest, market risk, FX risk and damages claim	<ul style="list-style-type: none"> <li>• Contingency plans should be in place and rehearsed to ensure that production will not be disrupted for lengthy periods of time.</li> <li>• Alternative power sources and backup sites for processing should be available.</li> </ul>
Unauthorized access to data processing center or data lines (hackers)	Debit interest, market risk, FX risk and damages claim, fraud	<ul style="list-style-type: none"> <li>• The data processing center is one of the most critical areas. Any political or disruptive action in this area could seriously disrupt the ability to provide a service.</li> <li>• The data center should be a highly secure area with physical and data access restricted to necessary personnel only</li> <li>• Use scrambling techniques</li> </ul>
Third party service disruption (e.g. central depository system break down)	Debit interest, market risk, FX risk, systemic risk and damages claim	<ul style="list-style-type: none"> <li>• Third parties on whose functioning one is dependent should have contingency solutions in place to prevent prolonged disruption of service.</li> </ul>

### 3.4 Collateral Credit Risks

It is common in banking for a credit facility to be arranged by means of a letter whereby the bank offers the facility to the customer. This arrangement letter describes the aspects of the facility, the willingness of the bank to grant the facility (up to a specified amount), rate(s) of interest and commissions payable, the currency in which the overdraft is granted, the applicability of the terms and conditions of the bank, the security granted to the bank and the choice of the applicable law. The arrangement letter is signed by the customer to show his agreement with the terms.

An important condition of the general terms and conditions is the general pledge to secure the customer's obligations to the bank. If the customer wishes to release part of the collateral, sufficient cover must remain. If so requested, the customer must provide additional collateral for existing obligations to the bank. The bank is entitled to sell the collateral to the amount of the customer's debt but can only do so after giving proper and timely notice of default to the customer. The bank is entitled to terminate the credit facility with a sufficient period of notice if there are compelling reasons to do so.

If shortcomings in the performance of the agreement are attributable to the bank, the bank is liable.

The risks associated with credits against collateral are:

*a) The overdraft becomes unsecured*

Due to changes in collateral value of the securities, a proper positive margin should be maintained and the collateral itself daily marked to market prices. The margin percentage must depend on the type of securities and market liquidity of the securities.

*b) The collateral appears to be encumbered*

The securities must be in the ownership of the client and unencumbered. If the securities belong to third parties, the customer must be in a position to repledge the securities to the bank.

*c) The customer is not in a position to offer security*

The bank must be aware of the capacity of the customer, legal requirements the customer is under or possible transgression of the business purpose of the customer, which may interfere with the principle of good faith if the bank accepts stock as collateral from the customer.

*d) The collateral becomes illiquid*

If market liquidity prevents the selling of the collateral, the bank runs a credit risk or incurs a loss because the proceeds of the sale are less than the amount of the overdraft. Therefore monitoring the market liquidity is important and also the need to have well spread collateral.

### 3.5 Securities Borrowing/Lending Risks

The special relationship arising between a customer and a custodian because of borrowing/lending activities is, although international differences probably occur, governed by contract law. The issues of due care and acting in good faith are also relevant here. What type of documentation is involved in the arrangement depends on local legal requirements and on the role the two parties assume in the transaction. Typically, in the USA, a custodian may act in any of the following capacities:

- Principal:** A lender institution offering securities from its own account is acting as principal. A lender institution offering customers' securities on an undisclosed basis is also considered to be acting as principal.
- Agent:** A lender institution offering securities on behalf of a customer owner is acting as an agent. For the lender institution to be considered a bona fide or "fully disclosed" agent, it must disclose the names of the borrowers to the customer-owners (or give notice that names are available on request), and must disclose the names of the customer-owners to borrowers (or give notice that names are available on request). In all cases the agent's compensation for handling the transaction should be disclosed to the customer-owner. Undisclosed agency transactions, i.e. "blind brokerage" transactions in which participants cannot determine the identity of the counterparty, are treated as if the lender institution were the principal.
- Directed Agent:** A lender institution which lends securities at the discretion of the customer-owner is acting as a directed agent. The customer directs the lender institution in all aspects of the transaction, including to whom the securities are loaned, the terms of the transaction (rebate rate and maturity/call provisions of the loan), acceptable collateral, investment of any cash collateral, and collateral delivery.
- Fiduciary:** A lender institution which exercises discretion in offering securities on behalf of and for the benefit of customer-owners is acting as a fiduciary. For purposes of these guidelines, the underlying relationship may be as agent, trustee, or custodian.
- Finder:** A finder brings together a borrower and a lender of securities for a fee. Finders do not take possession of the securities or collateral. Delivery of securities and collateral is direct between the borrower and the lender and the finder does not become involved. The finder is simply a fully disclosed intermediary.

Custodians most commonly offer securities to customers on an undisclosed basis, therefore being considered principals in the transaction. The main types of basic risks associated with the custodian acting as principal in a borrowing and lending program are the following:

#### *a) Liability Risk*

A securities loan operates under the agreement that the borrower receives securities under the obligation to return the same (amount of) securities to the lender, while the lender retains most of the benefits of ownership (but loses the actual ownership during the period of the loan). The custodian acting as principal is liable should anything go wrong. The primary risk here is that borrowed stock is not returned. A lending agreement normally has the provision that in the final instance the market value of the stock is refunded to the lender.

#### *b) Dealer Risk*

The measures to be taken to limit the risk of the broker being unable to return the securities are credit review and diversifying lending activities across borrowers.

### *c) Reinvestment/Collateral Risk*

A financial loss in case of a borrower's default occurs if the value of the collateral in cash or securities is, at the time of default, less than the replacement value of the loaned securities. This price risk is reduced by requiring maintenance of a proper positive margin which is marked-to-market on a daily basis.

If collateral is in the form of securities, it should be ensured that these securities are eligible (according to existing guidelines) and unencumbered (giving the custodian the possibility of selling stock if necessary).

## **3.6 Custody Risks Associated with Derivative Products**

The specification of the relationship between the bank and the customer depends on their respective capacities when carrying out transactions in derivatives. The customer may act as end-investor or as intermediary (such as a public order member). The bank may act in any of the following capacities:

### *a) Custodian for the underlying values of the derivatives*

The regular custody relationship features apply (e.g. blocking the securities that may be needed).

### *b) Agent for collateral due to margin requirements of the customer*

The bank must act as third party holder of a security (pledger), administer the securities in question in a pledged account and must follow the instructions from the pledger. The customer must represent to the bank that it has the power to pledge "free, clear and unencumbered title of securities". Due to prevailing circumstances and legal requirements the custodian must demonstrate due care in accepting the transfer instructions of the customer.

### *c) Position administrator of the derivative products*

The custody agreement must cover the position administration of derivatives, the bank undertaking to keep a complete and accurate record of positions and to inform the customer accordingly.

### *d) Clearing agent for derivatives*

If the bank acts as clearing agent or clearing member, the rules and conditions of the clearing organization of the derivative exchange in question apply. The bank must enter into a clearing agreement with the customer whereby the rights and obligations of the two parties are specified. Three elements are of importance:

1. The customer acts on the respective exchange for the account and risk of the clearing agent. In other words the clearing agent guarantees the customer to the exchange (via the clearing organization of the exchange). This is organized by means of a so-called Statement of Authority Annex to the clearing contract to the effect that the customer is authorized to act in the name of the clearing agent. This authority is revocable between clearing agent and customer (when effected against the clearing agent must act in good faith and respect the economic interests of the customer) and this revocation comes into effect with the clearing organization after proper notification by the clearing agent.
2. It is imperative that the clearing agent follows risk guidelines and executes a sufficient margin administration to secure that the customer can fulfill his obligations to the bank. In general a clearing relationship is combined with a credit relationship with the bank. The clearing agent should have in place a risk assessment model, follow at least minimum margin requirements of the clearing organization, administer sufficient collateral in this respect and obey position limits per product per type of customer (as laid down by the clearing organization).
3. In case of exercises and assignment the clearing agent must employ proper (random) selection procedures and the bank must be able to deliver (or receive) the corresponding underlying values within the timeframe established.

## 4. Relationship Risks

### 4.1. Relationship with Clients

Cause	Exposure	Countermeasures
No specific law on the relationship between client and custodian bank	Damage claim based on contractual liability	<ul style="list-style-type: none"> <li>• Where no specific law exists, the relationship is governed by the principles of contract law and therefore many custodian banks apply their "General Terms and Conditions".</li> <li>• The "General Terms and Conditions" oblige the custodian bank to exercise due care and to act in good faith in the client relationship.</li> <li>• Due care is required in all transactions with the client.</li> <li>• To act in good faith means in accordance with what the parties may expect the contract to mean.</li> </ul>
Absent or incomplete custody contract	Liability in contract if the bank does not fulfill the obligation arising from the contract; liability in tort if the bank acts contrary to its legal obligations, due care required in society or the economic interests of the client.	Use of an individualized or standardized agreement setting forth the different aspects of the service, the conditions under which these are performed, the applicability of the "General Terms and Conditions" and the choice of law and court in case of a dispute. There should be understanding between client and the bank as to what their respective capacities are: The customer as principal and the bank as agent. The bank must arrange with the client that all the actions of the bank are based on the (standing) instructions of the client and are for the account and risk of the client.
Law or regulatory principles	Liability in contract	If law or regulatory principles have an impact on the economic behavior of the client, the custody agreement should reflect or refer to these provisions. The result in general is supervision by the bank of the proper economic behavior of the client and the determination of the capacity and functions of the bank for the client.
Sub-contracting of custody services	Damages claim	If the range of the global custody services causes the custodian to use third parties to fulfill his obligations to the client, the custodian must be authorized to sub-contract, and he must be able to prove that the selection of each subcustodian has been made with due care. The risk of being held liable can be reduced if use is made of opportunities to access subcustodians' books and to ensure entitlement to recover assets or receive compensation in case of bankruptcy or loss. The potential political risks, the convertibility of cash or other monetary import and export regulations, should be permanently evaluated. Description of local circumstances in connection with services provided can be stated in a side letter to the custody contract, if necessary.

Cause	Exposure	Countermeasures
Improper identification of the client	Damages claim	Maintenance of accurate and up-to-date client documentation. It must be known and documented on a signature card, supported by a copy of the passport or identity card who the bank is dealing with, who the customer is and which legal identity the customer has. Sources of reference for legal entities will be inscription in the Register of Companies, the Articles of Association of the client and a resolution of its Board of Directors.
Invalid authorization of the client or of the client's representatives	Damages claim	Client's documentation must include who is authorized to act on client's behalf, how and to what extent (moneywise and whether individually or collectively). Client's representatives must have the legal capacity to contract. Proper standard of care also extends to test key arrangements and to third parties who are authorized by the client to act on his behalf in his relationship with the bank (unlimited power of attorney or investment management mandate only). The Articles of Association containing the objective of corporate clients must be known to the bank. These articles and rules may conflict with the practice due care by the bank in its operations on behalf of the client and on the type of services the bank can offer to the client.
Changing identity of the client	Damages claim from legitimate (representatives of) customer	Application of "General Terms and Conditions" to the relationship: A change in the identity (or authentication) of the customer becomes relevant when made known in writing by the client. Due care must be exercised when the client loses the capacity to contract due to political reasons, nationalization, embargo or becomes legally incapable of contracting due to bankruptcy, guardianship or receivership. Such situations can also be dealt with beforehand through incorporation of relevant clauses in the agreement with the client.

## 4.2 Relationship with Investment Managers

There are two distinct relationships of investment managers to custodians:

- a) The investment manager acting as principal in respect of the assets managed - e.g. the investment manager "owns" the investment trusts, unit trusts or mutual funds; or the investment manager is responsible for investing his company's own corporate accounts. In this case, the investment manager is a client of the custodian bank and a contractual relationship would exist directly between the custodian and the investment manager, negotiated with all relevant risks in mind.
- b) The investment manager acting as a third party intermediary appointed to manage funds on behalf of a custodial client, e.g. a pension fund. In this case the custodial contractual relationship is with the client, not with the investment manager. Additional safeguards need to be borne in mind:

- The client must provide clear direction to the custodian authorizing that certain instructions be accepted from the investment manager(s) appointed by the client.
- Credit limits for foreign exchange transactions and overdrafts must be identified within the custodial relationship.
- When a custodian is acting as trustee, any investment restrictions imposed on the investment manager by the client must be known to the custodian.
- The investment manager must provide specimen signatures to the custodian of persons authorized to act in respect of a certain account.
- A regular, ongoing review process should be maintained by the custodian with investment managers and clients, as to whether or not agreed investment standards are being met, and whether or not instructions are received on a timely basis. In this way, obligations and risks can be better managed by all parties and forthcoming changes in investment profiles can be actively anticipated.

Whatever the contractual relationship may be, it is essential that, in addition to the above, the credit limits relating to foreign exchange transactions and any authorized overdrafts be clearly spelled out in the contract.

### ***General Remarks***

Today, the custodian bank is usually included in the same intellectual partnership as both the client and the investment (or fund) manager. This has not been the case in the past.

Consequently, it will be prudent to review all of the client's requirements as well as the investment manager's, to establish the standards of service that should be delivered to both. It is advisable that there is a regular ongoing review process to ensure that the agreed standards are being met and that any changes in the investment profile that may be forthcoming are identified proactively.

While the investment manager may not necessarily be paying the custodial fees, the working relationship between the investment manager and the custodian is all the same of critical importance. It is advisable to view the investment manager as a client (regardless of whether income is forthcoming or not) and to establish information flows, systems, etc. that eliminate as much redundant input as possible. At the same time, the systems have to be extremely cost-effective and must provide value added information to the fund manager.

Where appropriate, it will be necessary to establish agreements relating to operational issues as well as standards of performance to be met from both sides. Thereafter, it is essential that a regular monitoring review shared between the parties is undertaken and that all issues of concern are raised and dealt with within acceptable deadlines.

A fund manager is also a potential source of a peripheral revenue stream by maintaining multi-currency cash balances with the custodian bank, as well as undertaking foreign exchange contracts, both spot and forward. Consequently, it is essential that the treasury function of the custodian bank is looped into the process in order that the rates both on cash and foreign exchange be competitive. Given that rates are competitive, then there will be less necessity for the fund manager to undertake third party foreign exchange transactions and to place funds with alternative institutions, thus eliminating extra fund transfer activities.

From experience, a fund manager who receives an error-free and efficient service from a custodian bank will realize that his overall investment performance has been enhanced by the activities of the custodian bank. Consequently, there are situations where a fund manager acting on behalf of the third party has the ability to actively influence future custodial appointments.

### **4.3 Relationship with Subcustodians**

Since a global custodian, as a rule, uses subcustodians abroad, i.e. domiciled and established in foreign countries, the typical country risks are also dealt with in this paragraph.

Due to the preeminent importance of the relationship between a global custodian and its subcustodians, a few remarks on the principles of this relationship, the main criteria for selecting a subcustodian, and some guidance on formulating a subcustodian agreement, seem appropriate:

#### ***Principles of Relationship between Global Custodian and Subcustodian***

- a) The service quality of the global custodian can only be as good as that provided by the subcustodian. The quality of the service contains a risk potential in as much as it has a direct influence on the development as well as on the result of the business.
- b) The subcustodian must be highly competent, i.e. it must be familiar with the country-specific risks and keep them in mind. It must be one of its main tasks to “think” for its client, i.e. the global custodian, of whom it cannot expect knowledge regarding all specific local customs.

It is of importance that the subcustodian has at its disposal certain logistics, for instance:

- modern technical systems, mainly up-to-date data processing equipment and software;
- an appropriate number of qualified staff with know-how and experience gained over a number of years.

In the selection of a subcustodian, global custodians are adopting more and more the practice of using questionnaires to obtain data direct from their candidates. Such questionnaires are usually very broad in scope and contain questions, the answers to which are in part subject to bankers’ discretion. Apart from the relatively large effort involved in answering such questions, it is necessary to treat sensitive information with discretion.

- c) The subcustodian must be a solvent company in the market and possess an appropriate rating.

#### ***Criteria for Selecting a Subcustodian***

The following criteria are decisive:

- financial rating (e.g. size of equity and reserves), market position, infrastructure and logistics
- service quality
- price for services rendered

Some global custodians which belong to a financial services group with a global presence may be able to select branches or subsidiaries of the same mother company as their subcustodians, at least in some places. Also in this case, most of the above criteria should be considered.

#### ***Guidance on Formulating a Subcustodian Agreement***

To ensure that all parties involved fully and clearly understand the risks they are exposed to when active in the international arena - be it the investor, his fund manager, his global custodian, the latter’s subcustodians or still other parties -, it is of utmost importance that precise agreements in writing are concluded between the principals and their respective agents. In the context of this report, special attention has been paid to the custodian agreements to be concluded between each global custodian and its subcustodians. On the one hand, the usually high value of the assets held in subcustody, together with the fact that different legal systems and market practices have to be considered, makes it mandatory to find a legally compatible and mutually acceptable solution as far as the contents and wording of the contract are concerned. On the other hand, the ongoing changes in financial markets, the new innovative instruments and developments in technical infrastructure call for a certain flexibility of the contractual

terms and conditions in order to avoid frequent changes to the agreement. Moreover, a global custodian would ideally wish to have as far as possible identical agreements with all its subcustodians. The same applies, of course, to subcustodians who act as agents for a multitude of foreign global custodians. Trying to reciprocally understand the client’s needs and the agent’s capabilities, and afterwards stating them (together with the respective responsibilities and liabilities) in the custodian agreement, is the best way to reach a satisfactory, problem free mutual relationship. Annex 4 contains a model version of such an agreement. However, it serves as an example only. No part of it should be used in real contracts without competent legal advice.

The main risks to be aware of in the subcustodian relationship are presented below:

Cause	Exposure	Countermeasures
Bankruptcy of subcustodian	Credit risk, market risk, FX risk and damages claim	<ul style="list-style-type: none"> <li>• Selection of top-rated subcustodian and continued review of financial strength</li> <li>• If no top-rated subcustodian is available, have selection approved by client who in this way assumes risk for selection.</li> <li>• Impose contractually that country and credit risk with respect to all subcustodians are to be borne by the client (except gross negligence).</li> <li>• Check periodically that set limits for funds and securities accounts are not exceeded. (It has to be borne in mind that securities in a custody account will in most countries be treated as clients’ property and separated from a failing bank’s assets. In contrast, credit balances in funds accounts can normally not be segregated).</li> <li>• Where the client’s country of domicile prescribes specific criteria for the eligibility of a subcustodians abroad (e.g. SEC Rule 17f5 in the USA) such conditions must be scrupulously followed.</li> </ul>
Operational deficiency	Debit interest, market risk, systemic risk, damages claims, FX risk and damage to reputation	<ul style="list-style-type: none"> <li>• Select subcustodian only after careful evaluation of competence, professionalism and proven quality performance of management, manpower, systems, vaults, etc.</li> <li>• Conclude custody agreement and lay down operational procedures with every subcustodian defining its obligations, fees and liabilities.</li> <li>• Carry out periodic reviews of established standards of performance</li> <li>• Evaluate redundancy and disaster recovery mechanism (hardware, software, communication, power supply) of subcustodian and market place.</li> <li>• In case of extraordinary increase of open items, mistakes or discrepancies, these should immediately be taken up with the subcustodian’s operations department and management.</li> <li>• Visit every subcustodian every one to three years.</li> <li>• Implement subcustodian performance monitoring standards.</li> </ul>

Cause	Exposure	Countermeasures
Counterfeit securities	Market risk, FX risk and damages claims, fraud	<ul style="list-style-type: none"> <li>• Custody and subcustody contracts will need to cover aspects of fraud, willful misconduct and gross negligence. It should be established prior to entering into an agreement that such clauses are enforceable in the event of a loss.</li> </ul>
Changes to the legal system affecting foreign ownership, political upheaval, acts of war	Country risk, may also be transfer risk	<ul style="list-style-type: none"> <li>• In principle, the country risk connected with investment in a third country cannot be avoided. It has to be borne mainly by the investor but it can also have serious implications for the global custodian (e.g. blockade of assets and revenue, FX loss, disclosure of ownership and formalities to prove good title in order to lift the blockade, legal fees, etc.)</li> <li>• A thorough understanding by the global custodian and its clients of the structure and laws pertaining to each market are essential with respect to emerging markets where the infrastructure and legal system are very different from mature markets. Any failure to research new markets may prevent a global custodian from functioning effectively and lead to problems and losses.</li> <li>• The general situation of each country should be reviewed at least once a year.</li> </ul>
Freeze of transfer of revenue and/or capital to be repatriated (e.g. due to country's insufficient foreign exchange reserves)	Transfer risk, maybe damages claim	<ul style="list-style-type: none"> <li>• In principle, the country risk connected with investment in a third country cannot be avoided. It has to be borne mainly by the investor but it can also have serious implications for the global custodian (e.g. blockade of assets and revenue, FX loss, disclosure of ownership and formalities to prove good title in order to lift the blockade, legal fees, etc.)</li> <li>• The global custodian should be careful to confirm conversions into local currency in favor of his clients only on condition that the FX transfer has actually taken place.</li> </ul>
Taxes on non-resident assets and revenue are subject to frequent changes and may suddenly require a custodian to disclose ownership details or to accept retroactively increased charges	Country risk (tax risk)	<ul style="list-style-type: none"> <li>• The global custodian should follow tax changes abroad permanently, primarily assisted by its subcustodian.</li> <li>• Tax benefits (e.g. preferential treaty rates) should only be applied if the clients are beyond any doubt entitled to them.</li> <li>• Where ownership declaration are required - be they of general nature (e.g. non-resident and/or non-citizen) or requiring name and address - the client's authorization should, where necessary, be obtained beforehand.</li> </ul>

<b>Cause</b>	<b>Exposure</b>	<b>Countermeasures</b>
Investment restrictions (limited to a certain percentage of an entire issue or class of securities)	Country risk, transfer risk, market risk and damages claim	<ul style="list-style-type: none"> <li>• It should be contractually agreed that such risks are to be assumed by the client (or where appropriate by his investment manager).</li> <li>• The global custodian should closely follow all changes of investment and currency restrictions, assisted by its subcustodian.</li> <li>• The ISSA Handbook and ISSA Newsletters should be consulted as they provide detailed information on investment and currency restrictions in the most important markets.</li> </ul>
Authorization to act as a professional custodian required by legal system is missing	Damages claim	<ul style="list-style-type: none"> <li>• Ask for and verify confirmation that required authorizations have been granted.</li> </ul>
Holdings of insiders or holdings exceeding defined sizes may be subject to certain reporting requirements to a regulatory body and/or the stock exchange	Country risk, transfer risk, market risk and damages claim	<ul style="list-style-type: none"> <li>• It should be contractually agreed that such reporting requirements will be fulfilled by the client.</li> <li>• The ISSA Handbook should be consulted as it provides detailed information on insider and other reporting requirements in the most important markets.</li> </ul>

## 5. Communication Risks

There are various kinds of risks associated with communications. They can be due, for example, to wrongly addressed messages, the faulty or mutilated contents of a communication, belated or lack of notification, or the misuse of or unauthorized access to information. The ultimate extent of the risk in any particular case depends on the communication channels and on any security arrangements that may exist and must function to avert the risk.

As a rule, communication has been by mail, telephone, telex, teletex and fax, but technical developments have led to a new phenomenon worldwide involving the integration of telecommunications and data processing in "telematics". Cases in point are balance reporting and money transfer systems.

Telematics presents the widest field when it comes to identifying the types of risk. For the sake of simplicity, the following remarks deal mainly with the risks associated with telematics and with related aspects that may have to be covered in the contractual agreement between the communication partners. However, these remarks apply also to other types of communications which may require similar precautionary measures.

First, of all, we must examine the specific features of telecommunication to identify applicable rules of civil law. The relationships and responsibilities of all operators in this field have to be investigated to establish which contract types and liabilities have to be considered and whether there is a need for additional agreements going beyond the General Business Conditions.

One problem area results from the fact that the infrastructure of telecommunication systems is traditionally organized and controlled on a national basis and from the fact that we are dealing with nationally-based service systems. In cross-border telecommunications and telematics services, the aim must be to link these national arrangements and systems in a way that will produce an internationally functioning system. The second set of problems is due to the differences in the way diverging interests are taken into account in national regulatory concepts. If an internationally linked communication system is to function, it cannot ignore such divergences.

During the course of such an investigation, the following aspects have to be looked at in particular:

### *a) Scope of Service*

- explicit and exact description of the scope of service, the availability of the system and agreement on the cost/benefit ratio (price or tariff versus duty to supply and process information)
- service change clause (or right of modification) with regard to new services or discontinuation of existing services
- obligation to provide directions for usage, manuals, operating instructions, etc.
- jurisdiction and responsibilities applicable to the installation and maintenance of hardware and software
- duration and conditions for termination of contractual relationship
- rules regarding the content of messages (e.g. conformity with ISO /SWIFT standard, EDIFACT)
- defining when a message will be considered as "received" and has a binding effect, and which message types are included (e.g. delivery instructions)
- definition of the legal nature of messages, also for cases where - in addition to electronic information - hardcopy statements are drawn up and dispatched
- provisions governing possible cancellations, objections and challenges
- agreement on whether network services are part of the information supplier's liability and whether any third-party network operator is the information supplier's agent or whether the information supplier's liability is limited to the exercise of care in selecting the third party.

#### *b) Operational Reliability/Abuses*

- definition of technical procedures and rules for user identification (e.g. personal identification number, password and transaction numbers)
- responsibilities with regard to precautions to be taken to prevent unauthorized intrusion into the data network and the computer system and to prevent unauthorized access to data and the manipulation of network and data (hacker syndrome)
- protective measures, if any, against computer viruses
- decision as to whether the data to be transmitted via the communication network has to be encrypted. (Data sensitivity and data transfer - sending of gross or net data - have to be considered when deciding on the associated question of hardware and software protection.)
- obligation of the system operator to keep records and related documentation capable of identifying whoever used the system when, where and for what purpose (audit trail)
- agreement on duties and authorizations with regard to system protocols, controls of input data to reduce the risk of duplicate messages, input errors, wrong addresses, etc. (e.g. "four-eyes principle") and confirmation of receipt of proper data.

#### *c) Data Protection*

- data protection and secrecy arrangements, taking differences in national regulation into account.

#### *d) Copyright*

- definition of the extent to which the user of hardware and software may - or may not - use these devices and programs and pass them on to third parties
- decision on whether the recipient is allowed to download data received, and possibly copy or further process and transmit such data or upgraded data to third parties
- agreement covering liability or exclusion of liability arising from the aforementioned points.

#### *e) Liability in Case of Loss*

- agreement on entitlement to claims for compensation, rectification of claims, a second transmission in the case of mutilated or lost messages or the belated transmission of messages (part, defective or non-performance) as well as on the extent of liability in the case of software errors and defects in the communication network
- definition of tolerance limits for system breakdowns
- liability in case of loss due to gross negligence or serious violation of the terms of the contract
- clarification on where the burden of proof lies in case of infringement of duties, i.e. who has to produce exonerating evidence
- fixing of applicable jurisdiction and place of court in the case of a legal dispute
- limitation of risk potential and liability with regard to services to be provided by third parties (e.g. loss caused by third-party network operator)
- exclusion or restriction of guarantees and agreement on prescription period for contractual claims
- examination of whether insurance against misuse of the system by third parties is possible and whether such insurance is to be taken out.

## **6. Conclusions**

### **6.1**

As outlined in chapter 2, there is a great diversity of risks to which parties involved in global custody can be exposed. There are many protective measures that help eliminate or reduce at least some of the risks mentioned. In general, it can be said that subcustodians and global custodians should be able to avoid really big losses. Human errors, system failures or lack of specific know-how may, however, easily, and frequently, cause compensation payments to clients for damages, to cover loss of interest, etc. The damage per client typically depends less on the cause of a malfunction than on the value of the assets involved.

### **6.2**

While it is possible and desirable in some instances to completely avoid certain risks, it may in other cases be more appropriate to tolerate a limited amount of risk. This may require preventive measures or the transfer of some part of the risk to other parties. Such measures represent a kind of risk management process integral to prudent global custodianship. Consequently, the emphasis should be more on risk containment management than on risk avoidance at any price.

### **6.3**

Some risks are theoretical rather than real. Therefore, it is essential to recognize and understand the various kinds and the extent of risk exposure. This study attempts to provide guidance to market participants on how to minimize losses.

### **6.4**

Cross-border investments always imply additional risk compared with domestic investments. The specific cross-border risks should quite naturally be borne mainly by the beneficial owner of the assets held.

### **6.5**

A global custodian or subcustodian with modern depository facilities, an up-to-date organizational workflow and structure, experienced and well-trained personnel, an efficient and reliable EDP and data communication system should be able to avoid big losses. If, however, a combination of negative events occurs, a loss of up to a six- or seven-digit US dollar amount cannot be ruled out. Therefore, global custody is rather a medium to low risk business than a high risk service activity.

### **6.6**

Special attention has to be paid to the so-called "emerging markets" and other financial centers with an insufficient infrastructure, i.e. where the Group of Thirty's Recommendations have not yet been fully implemented. In such an environment, the danger of a custodian making mistakes for which he will be held liable is far greater than in markets with a highly developed settlement and depository system.

### **6.7**

Additional care is needed in emerging countries and in countries with investment and/or currency restrictions. A permanent evaluation of related risks for the custodian business is indispensable.

## **7. Recommendations**

Based on the foregoing conclusions, ISSA recommends:

### **7.1**

That all financial centers implement the Group of Thirty's Recommendations without any delay, where this has not already been done.

### **7.2**

That all global and subcustodians constantly monitor their risk exposure, maintain a high professional level of their management and personnel, and ensure a high reliability of their technical installations and systems, as well as flexibility to meet new challenges.

### **7.3**

That global and subcustodians draw up precise and comprehensive custodian agreements and operational memoranda with their partners in order to make all important risks transparent, in this way identifying who has to bear them, with a view to minimizing unavoidable risks.

### **7.4**

That global and subcustodians take not only the turnover (number of transactions) into account, but also the asset value-related risk elements and the development status of the markets concerned when fixing services fees in order to be able to absorb all possible contingencies.

## **Annex 1**

### **ISSA 5 Recommendation No. 7: Risks**

That ISSA should work towards defining the types and nature of risks associated with global custody.

That ISSA should further act as the distributor of work undertaken on different markets with a view to improving international understanding of such risks.

That areas to be addressed should include credit, operational, technical, communication and legal risks.

## **Annex 2**

### **Terms of Reference for ISSA Working Group 3 on Global Custody Risks**

- a) To identify and describe the various kinds of risk associated with global custody (including credit, operational, technical, communication, emerging market and legal risks).
- b) To collect and disseminate the results of global custody risk studies and risk management techniques on a worldwide basis, with a view to better understanding such risks and avoiding them as far as possible.

## Annex 3

### Composition of ISSA Working Group 3

Union Bank of Switzerland, Zurich	Kurt Meuche (Chairman) Senior Vice President, ISSA Secretary
Chase Manhattan Bank N.A., London	Colin Grimsey Vice President
Deutsche Bank AG, Frankfurt	Theodor Hertfelder Vice President
Dresdner Bank AG, Frankfurt	Siegfried Heissel First Vice President
Kas-Associatie N.V., Amsterdam	Dr Laurens G. Vis Managing Director
Royal Trust, Toronto	Lyn Statten Vice President
Swiss Bank Corporation, Basle	Arnulf Manhold Vice President
Telekurs AG, Zurich	Nourredine Yous Assistant Vice President
Westpac Banking Corp., London	Alan Ross Director

## Annex 4

### Model Subcustodian Agreement

Agreement made this \_\_\_\_ day of \_\_\_\_\_ 19\_\_ , between \_\_\_\_\_ (hereinafter referred to as the "Global Custodian"), having its registered office at \_\_\_\_\_ and XYZ (hereinafter referred to as the "Subcustodian"), having an office at \_\_\_\_\_ (domicile of Subcustodian).

Whereas, the Global Custodian wishes to establish Account/s with the Subcustodian to hold and maintain certain Securities and related Cash for which the Global Custodian is responsible as custodian;

and

Whereas, the Subcustodian agrees to establish the Account/s and to hold and maintain all Securities and related Cash in the Account/s in accordance with the terms and conditions herein set forth.

Now therefore, in consideration of the mutual covenants and agreements hereinafter contained, the Global Custodian and the Subcustodian agree as follows:

#### **I. Definitions**

Terms used in this Agreement shall have the meaning as defined hereinafter:

##### **A. Instructions**

The term "Instructions" means:

1. Instructions in writing signed by authorized individuals designated as such by the Global Custodian;
2. SWIFT, telex or tested telex Instructions from the Global Custodian;
3. Other forms of Instructions in computer readable form as shall customarily be used for the transmission of like information, and
4. Such other forms of communication as from time to time may be agreed upon by the Global Custodian and the Subcustodian, which the Subcustodian believes in good faith to have been given by the Global Custodian or which are transmitted with proper testing or authentication pursuant to terms and conditions which the Global Custodian must specify.

Unless otherwise expressly provided, all Instructions shall continue in full force and effect until cancelled or superseded by either party. The Subcustodian shall act in accordance with Instructions and shall not be liable except in the case of willful misconduct or gross negligence on its part. The Subcustodian will, in performance of all Instructions, take relevant action in accordance with accepted industry practice and local settlement practices.

##### **B. Account**

The term "Account" means collectively all Custody Accounts with related Cash Accounts. The Cash Accounts can be either:

- a) Corresponding Cash accounts which are used solely for the settlement of securities related transactions and/or
- b) Ordinary Cash accounts which are used for the settlement of securities related transactions and general banking purposes.

##### **C. Securities**

The term "Securities" includes, without limitation, stocks, shares, bonds, debentures, debt securities (convertible or non-convertible) notes or other obligations or securities, options, warrants or other instruments representing rights to receive, purchase or subscribe for the same, or evidencing or representing any other rights or interests therein, or in any property or assets.

#### ***D. Cash***

The term "Cash" includes dividends, income, other payments and receipts with respect to securities, subject to clause "C. Securities" above.

#### ***E. Depository (CSD)***

The term "Depository" means a national or international central Securities clearing and/or depository organization which meets Subcustodian's criteria of quality, security and standard of performance in regard to its services.

#### ***F. Charges***

Means a right, charge, security interest, lien or claim of any kind collectively called "charges".

### **II. The Account**

#### ***A. Establishment of the Account***

The Global Custodian hereby requests that, upon receipt of its Instructions, the Subcustodian establishes and maintains for the Global Custodian upon receipt of its Instructions an Account/s which shall be composed of:

1. A Custody Account for any and all Securities from time to time received by the Subcustodian for depositing in said account.
2. A local currency (and/or) Cash Account/s for any and all Cash from time to time received by the Subcustodian for depositing in said account.

#### ***B. Use of the Account***

1. The Custody Account shall be used exclusively to hold, acquire, transfer or otherwise care for Securities which are held by the Global Custodian for the benefit of its customers.
2. The Cash Account shall be used exclusively for such Cash or cash equivalents as are transferred to the Subcustodian.

#### ***C. Transfer of Securities and related Cash in the Account***

Beneficial ownership of the Securities and Cash shall be freely transferable without the payment of money or value other than fees for safekeeping or administration or temporary debit balances. Also refer to paragraph V. below.

#### ***D. Securities in the Account***

If the Securities are deposited with the Subcustodian in a Custody Account, opened in the name of the Global Custodian, the title of the Securities remains with Global Custodian and the Global Custodian is entitled at any time to claim restitution of such Securities.

If on the other hand the Securities are held in collective deposit in CSD (as defined above), vaults of the Subcustodian or with an eligible Depository, the Global Custodian enjoys co-ownership in the balance of the collective deposit existing at any time in proportion to the number of Securities to which it is entitled and may claim restitution at any time.

#### ***E. Registration of Securities in the Account***

Securities which are eligible for deposit in a Depository as provided for in Paragraph IV. may be held with the Depository in an account opened in the name of the Subcustodian. Registered securities which are not held with a Depository will be registered in the name of the beneficial owner or of the Subcustodian's nominee, unless other instructions are furnished by the Global Custodian.

### **III. Services to be performed by the Subcustodian**

#### ***A. Services Performed pursuant to Instructions***

All transactions involving the Securities and Cash in the Account/s shall be executed solely in accordance with the Global Custodian's Instructions as that term is defined in Paragraph V. hereof, except those described in Paragraph B below.

#### ***B. Services to be performed without Instructions***

The Subcustodian will, unless it receives Instructions from the Global Custodian to the contrary:

##### *1. Collect Cash*

Promptly collect and receive any cash held in the Account which is called, redeemed or retired or otherwise becomes payable and all coupons and other income items which call for payment upon presentation and credit Cash receipts therefrom to the Cash Account.

##### *2. Exchange Securities*

Promptly exchange Securities where the exchange is purely administrative (including, without limitation, the exchange of temporary Securities for those in definitive form and the exchange of warrants, or other documents of entitlement to Securities, for the Securities themselves).

##### *3. Sale of Rights and Fractional Shares*

Whenever notification of a rights entitlement or a fractional interest resulting from a rights issue, stock dividend or stock split is received for the Account and such rights entitlement or fractional interest bears an expiration date, the Global Custodian must give the Subcustodian Instructions in every case.

##### *4. Collection of Income*

Unless otherwise instructed by the Global Custodian, the Subcustodian shall, with respect to all Securities held for the Global Custodian pursuant to this Agreement (i) collect all income due or payable, including all dividends, whether in cash or securities; (ii) present for payment, if necessary, and collect the amounts payable upon all such Securities which may mature or be called, redeemed, retired, or which otherwise become payable; (iii) endorse checks, drafts or other negotiable instruments for collection.

##### *5. Payment of Taxes and Receipt of Refunds*

To pay and cause to be paid from the Account any and all taxes and levies in the nature of taxes imposed on the Securities and related Cash in the Account by any governmental authority and shall use reasonable efforts to assist the Global Custodian to obtain all tax exemptions, privileges or other benefits, including reclaiming and recovering any withholding tax relating to the Account.

##### *6. Prevent Losses*

The Subcustodian undertakes to make its best efforts to secure or to limit the loss of entitlements attached to or otherwise relating to Securities and Cash held in the Account, subject to the provisions provided in Clause I.A. above and VII.C. hereafter.

#### ***C. Additional Services***

##### *1. Transmission of Notices of Corporate Action*

The Subcustodian will promptly notify the Global Custodian upon receiving official notice from the company (that is, after the shareholders general meeting) of corporate actions, affecting Securities held in the Account (including but not limited to) calls for redemption, mergers, consolidations, reorganizations, recapitalizations, tender offers, rights offers, exchanges, subscriptions and other offers.

## 2. *Voting Rights and Information*

The Subcustodian shall not exercise any voting rights in respect of Securities held by it pursuant to this Agreement, unless specifically instructed to do so by the Global Custodian. The Subcustodian will, if necessary, promptly deliver to the Global Custodian all notices, proxies, proxy soliciting materials and other communications relating to the Securities held in the Custody Account that call for voting or specific other actions.

## 3. *Monitor Financial Services*

In furtherance of its obligations under this Agreement, the Subcustodian will monitor a leading financial service with respect to announcements and other information regarding the Securities held in the Account, including announcements and other information with respect to corporate actions and dividend, interest and other income payments.

## **IV. Use of Depository (CSD)**

All eligible domestic and foreign Securities will be deposited with the relevant CSD but some of the Securities may be deposited in the Subcustodian's own vaults.

The Subcustodian is expressly authorized to deposit the Securities with a Depository of its choice, in its own name, but for the account and the risk of the Global Custodian. Securities which are traded exclusively or primarily outside the country of domicile of the Subcustodian shall, as a general rule, be deposited abroad or, if they are delivered elsewhere, shall be moved there at the expense and risk of the Global Custodian.

While so maintained, the securities held abroad shall be subject to the laws and established practices of the place of deposit. Should foreign legislation make it difficult or impossible for the Subcustodian to return the securities held abroad, the Subcustodian is only obliged to ensure that the Global Custodian has a proportionate redemption claim at the place of deposit, at its branch office or at a correspondent bank of its choice.

If registration in the name of the Global Custodian is uncustomary or impossible for securities registered in the holder's name, the Subcustodian may have these securities registered in its own name or in the name of a third party but for the account and at the risk of the Global Custodian.

## **V. Claims against Securities and Cash in the Account**

The Securities and Cash in the Account shall not be subject to any Charge by the Subcustodian or any eligible Depository other than a charge for the payment to the Subcustodian for any possible temporary debit balance of the Account resulting from the acquisition of such Securities and/or for administration fees. The Subcustodian will immediately notify the Global Custodian of any attempt by any party to assert any Charge or freeze of assets against the Securities held in the Account and shall take, whenever possible, for the account of the Global Custodian the appropriate action to protect the Securities against such Charges until the Global Custodian has reasonable time to respond to such notice.

## **VI. Subcustodian's Warranty(\*)**

(\*) Required especially for US Global Custodians. Global Custodians in other countries may require other warranties, e.g. German banks require a "Three Point Declaration".

The Subcustodian represents and warrants that:

- A) It is an eligible foreign custodian as those terms are defined in Rule 17f-5 of the Investment Company Act of 1940 and that it will immediately notify the Global Custodian, in the event that it will cease to qualify under the Rule as currently in effect or as hereafter amended, or
- B) Is the subject of an exemptive order issued by the United States Securities and Exchange Commission and that this order permits the Global Custodian to employ it notwithstanding the fact that it fails to qualify under the terms of the above Rule and that it will immediately notify the Global Custodian, if for any reason it is no longer covered by such exemptive order. The Subcustodian shall fulfill its

obligation to return the Securities within a reasonable time, at the premises of its office holding the Securities, provided this is not precluded by the nature of the Securities.

- C) That it is authorized by the laws of its country of domicile and by its articles of association to be active in the business of securities custody and related services.

Upon receipt of any such notification as required under A) or B) of this section, the Global Custodian may terminate this Agreement immediately without prior notice to Subcustodian.

## **VII. Miscellaneous Provisions**

### *A. Statements Regarding the Account*

The Global Custodian may request from the Subcustodian statements of the account. In addition, the Subcustodian will advise or notify the Global Custodian of any transfers of Securities to or from the Account.

### *B. Examination of Books and Records*

The Subcustodian is a bank organized under the laws of its country of registration and domicile and supervised and regulated by the state or federal supervisory body. The Subcustodian is audited by an external auditor, who carries out a review of the accounting and internal control system of the Subcustodian as part of his function as legal and independent auditor in accordance with the laws of the Subcustodian's country of domicile. A report is made to the respective state or federal supervisory board.

The Subcustodian does not allow externally appointed parties access to books and records kept by it. However, the Subcustodian will send statements directly to independent public accountants upon Instructions.

### *C. Standard of Care*

In holding, maintaining, servicing and disposing of Securities and Cash under this Agreement and in fulfilling any other obligations hereunder, the Subcustodian shall exercise the same standard of care that it exercises over its own assets. However, the Subcustodian's liability shall not exceed the range of liability as defined under Clause IV. above.

### *D. Loss of Cash and Securities*

The Subcustodian agrees that, in the event of any loss of Securities or Cash in the Account, it will use its best efforts to ascertain the circumstances relating to such loss and will promptly report the same to the Global Custodian and shall use any legal action as it deems appropriate to effect the respective possible recovery.

### *E. Insurance*

The responsibility of insuring the Securities or Cash remains with the Global Custodian. The Global Custodian does not have a direct claim against the insurers of the Subcustodian. Any compensation for damage which has occurred to Securities and Cash in the custody of the Subcustodian will be paid to the Subcustodian only. Consequently, any claims of the Global Custodian against the Subcustodian resulting from a loss of Securities and Cash in the Subcustodian's custody will be based on this Subcustodian Agreement and therefore be evaluated under the terms and conditions as set forth herein.

### *F. Fees and Expenses*

The Global Custodian agrees to pay the Subcustodian such fees and expenses for the services rendered by the Subcustodian pursuant to this Agreement as may be mutually agreed upon in writing from time to time.

### *G. Operating Requirements*

If the Global Custodian so requires, the Subcustodian agrees to follow such operating requirements as may be established after agreement between the Global Custodian and the Subcustodian from time to time.

*H. Termination*

This Agreement may be terminated by registered mail on 60 days' written notice to the other party, provided that any such notice, whether given by the Subcustodian or the Global Custodian, shall be followed within 60 days by Instruction specifying the names of the persons to whom the Subcustodian shall deliver the Securities and/or Cash shall be paid. If within 60 days following the receipt of such notice of termination, the Subcustodian does not receive such Instructions, the Subcustodian shall continue to hold such Securities and/or Cash subject to this Agreement until receipt of such Instructions. The obligations of the parties under this Agreement shall survive the termination of this Agreement.

*I. Notices*

Unless otherwise specified in this Agreement, all notices and communications with respect to matters contemplated by this Agreement shall be in writing, and delivered by mail, tested telex, SWIFT or other telecommunication method as mutually agreed from time to time, to the following addresses (or to such other address as either party hereto may from time to time designate by notice duly given in accordance with this paragraph):

To the Subcustodian:

To the Global Custodian:

*J. Confidentiality*

The Subcustodian and the Global Custodian shall each use its best efforts to maintain the confidentiality of the Securities and Cash in the Account and the beneficial owners thereof, subject, however, to the provisions of any laws requiring disclosure or banking secrecy. In addition, the Subcustodian shall safeguard any test keys, identification codes or other security devices which the Global Custodian shall make available to it.

*K. Assignment*

This Agreement must not be assigned by either party but shall bind any successor of the parties.

*L. Governing Law*

This Agreement shall be governed by the laws of the country of domicile of the Subcustodian. The exclusive place of jurisdiction shall be ..... (state selected place in Subcustodian's country of domicile). The Subcustodian's General Conditions and Safecustody Regulations, as per attached appendix, apply unless stated otherwise in the Subcustodian Agreement or Operating Agreement.

In witness whereof, the parties hereto have caused this Agreement to be executed and sealed by their respective officers thereunto duly authorized.

Global Custodian

Subcustodian

By: \_\_\_\_\_  
Name:

By: \_\_\_\_\_  
Name:

Title:

Title: