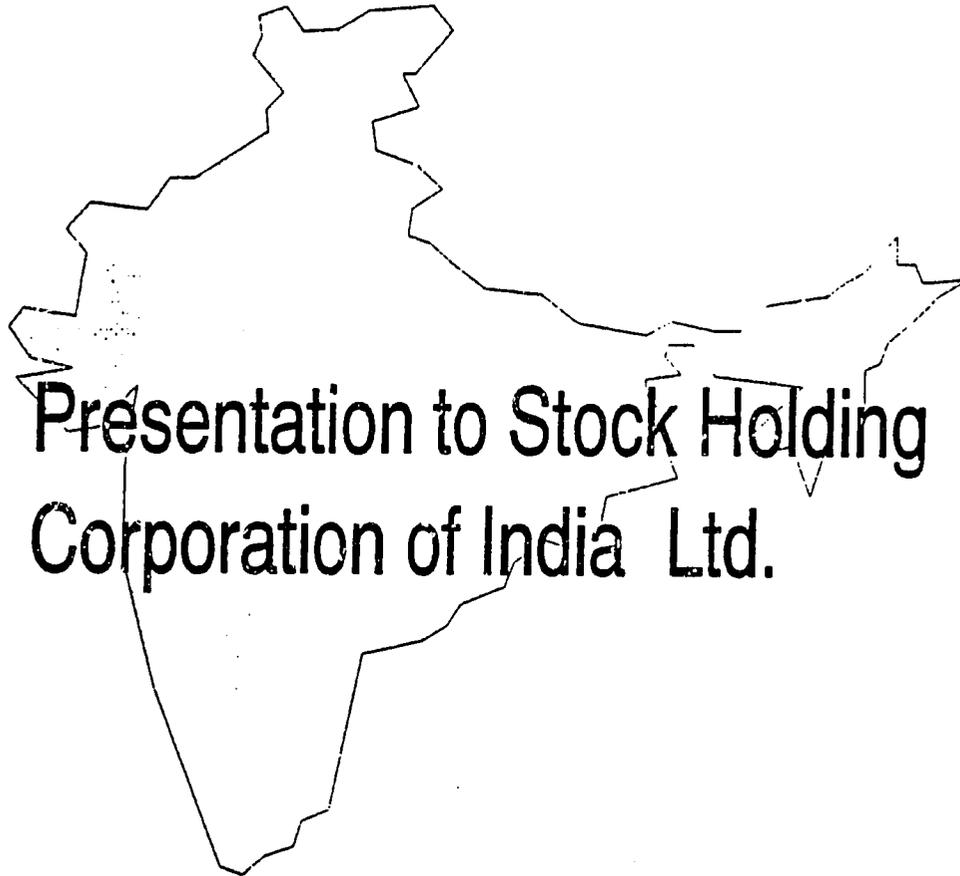


***NATIONAL CLEARANCE &
DEPOSITORY SYSTEM (NCDS)***



Price Waterhouse

June 11, 1992

**PHASE ONE
INTERIM REPORT**

PRESENTATION JUNE 11, 1992

OBEROI HOTEL, BOMBAY, INDIA

- | | |
|---|---------------------------|
| 1. Introduction | J.R. Breen |
| 2. Outline of Presentation | John Ruckrich |
| 3. International Standards -
Clearance and Settlement;
Lessons from Experience | Brian Taylor |
| 4. A Design for a National Clearance
and Depository System (NCDS) | Steve Bloch |
| 5. Legal and Regulatory Issues | Jan Aalbregtse |
| 6. Analysis of Systemic Risk Issues | Albert M. Anderson |
| 7. Review of the Project Implementation
Plan | John Ruckrich |



**STOCK HOLDING CORPORATION OF INDIA LIMITED
NATIONAL CLEARANCE & DEPOSITORY SYSTEM**

DESIGN OBJECTIVES

***PROGRESS TOWARDS INTERNATIONAL STANDARDS
(G-30 RECOMMENDATIONS)***

***MOST EFFICIENT SYSTEM - TO MINIMISE
OVERALL COST OF OPERATIONS
IN THE INDIAN CAPITAL MARKETS***

***REMOVE PAPER-WORK GRIDLOCK THAT NOW
CONSTRAINS THE GROWTH OF THE
INDIAN CAPITAL MARKETS***

**STOCK HOLDING CORPORATION OF INDIA LIMITED
NATIONAL CLEARANCE & DEPOSITORY SYSTEM**

BASIC DESIGN PRINCIPLES

PRACTICAL SOLUTIONS FOR INDIAN PROBLEMS

NO 'LIFTING' SOLUTIONS FROM OTHER COUNTRIES

***HOWEVER, LEARN FROM EXPERIENCES
OF OTHER COUNTRIES: AVOID THEIR MISTAKES
AND EMULATE THEIR SUCCESSES***

**STOCK HOLDING CORPORATION OF INDIA LIMITED
NATIONAL CLEARANCE & DEPOSITORY SYSTEMS**

***THE SYSTEM IS DESIGNED TO PROVIDE
REAL AND SUBSTANTIAL BENEFITS
TO THE FOUR MAIN CONSTITUENTS
OF THE CAPITAL MARKETS OF INDIA:***

THE COUNTRY

INVESTORS

INTERMEDIARIES

ISSUERS

**STOCK HOLDING CORPORATION OF INDIA LIMITED
NATIONAL CLEARANCE & DEPOSITORY SYSTEM**

BENEFITS TO THE COUNTRY

***GROWING AND MORE LIQUID CAPITAL MARKETS
TO PROVIDE FINANCING AND DEVELOPMENT***

***ATTRACT INTERNATIONAL CAPITAL TO THE INDIAN MARKETS
REDUCED PERCEPTIONS OF RISK***

REDUCED TRANSACTIONS COSTS

***SIMPLIFICATION OF CLEARING AND SETTLEMENT
PROCESSES***

INCREASE IN INTERNATIONAL COMPETITIVENESS

IMPROVED PROSPECTS FOR PRIVATISATION OF PSU'S

**STOCK HOLDING CORPORATION OF INDIA LIMITED
NATIONAL CLEARANCE & DEPOSITORY SYSTEM**

BENEFITS FOR INVESTORS

MORE IMMEDIATE LIQUIDITY

GREATER SAFETY

***REDUCED INSTANCES OF FRAUD, THEFT
COUNTERFEITING, ETC.***

***ELIMINATION OF FINANCIAL LOSS DUE TO
MISPLACEMENT, LOSS OF PHYSICAL SCRIP***

***REDUCED RISK INHERENT FROM LONG DELAYS
IN TRADING, SETTLING AND REGISTERING***

***GREATER OPPORTUNITIES FOR INVESTMENT IN NEW
INSTRUMENTS THAT CANNOT BE EASILY PROVIDED IN
THE MARKETS AS ORGANISED TODAY***

**STOCK HOLDING CORPORATION OF INDIA LIMITED
NATIONAL CLEARANCE & DEPOSITORY SYSTEM**

BENEFITS FOR ISSUERS

***UP-TO-DATE KNOWLEDGE OF SHAREHOLDERS NAMES
AND ADDRESSES***

***LARGE SAVINGS IN COSTS OF ISSUES
(NEW, RIGHTS, BONUS)***

***LARGE REDUCTIONS IN THE COST OF REGISTRY
AND TRANSFER FUNCTIONS***

***IMPROVED ABILITY TO ATTRACT INTERNATIONAL CAPITAL
WITHOUT THE COST OF ISSUANCE IN OVERSEAS MARKETS***

STOCK HOLDING CORPORATION OF INDIA LIMITED
NATIONAL CLEARANCE & DEPOSITORY SYSTEM

BENEFITS TO INTERMEDIARIES

(THESE ARE THE BANKS, BROKERS, REGISTRARS, CUSTODIANS)

LESS RISKY SETTLEMENT : DVP

- o FASTER*
- o LESS RISK OF BAD DELIVERY*
- o REDUCED INSTANCES OF FORGERY, COUNTERFEIT CERTIFICATES, LOSSES IN TRANSIT, THEFT, ETC.*

IMPROVED CASH FLOWS

REDUCED TRANSACTIONS COSTS

BASE FOR DEVELOPMENT OF THE RETAIL BROKERAGE BUSINESS

LARGE GAINS IN TRADING MADE POSSIBLE BY INCREASED CAPACITY FOR SETTLEMENT WITHOUT INCREASE IN OPERATIONAL COST AND RISK BY BROKERS

CUSTODIAL SERVICE OPPORTUNITIES FOR THE BANK WOULD GROW

**STOCK HOLDING CORPORATION OF INDIA LIMITED
NATIONAL CLEARANCE & DEPOSITORY SYSTEM**

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(THESE ARE THE BANKS, BROKERS, REGISTRARS, CUSTODIANS)

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- **PROJECT STATUS**
- **PROJECT METHODOLOGY**
- **FINDINGS**
 - **INDIAN SECURITIES PLAYERS**
 - **CHARACTERISTICS OF INDIAN SECURITIES MARKET**
- **ISSUES**

STOCK HOLDING CORPORATION OF INDIA LIMITED
PROJECT STATUS

PROJECT PHASES ARE:

PHASE I -- DEVELOPMENT OF THE STRATEGIC PLAN

INTERIM REPORT - 11 JUNE, 1992

PHASE II -- DEVELOPMENT OF THE FUNCTIONAL DESIGN

STOCK HOLDING CORPORATION OF INDIA LIMITED
PROJECT METHODOLOGY

INTERVIEWS

GOVERNMENTAL AND SECURITIES INDUSTRIES

GOVERNMENT OFFICIALS

FINANCE MINISTRY

LAW MINISTRY

CONTROLLER OF CAPITAL ISSUES

STOCK EXCHANGE OFFICIALS

BOMBAY

DELHI

CALCUTTA

MADRAS

(OTCEI)

OTHER SECURITIES INDUSTRIES ORGANISATIONS

BANKS

BROKERS

TRANSFER AGENTS

INSURANCE COMPANIES

MUTUAL FUNDS

SHCIL

RESERVE BANK OF INDIA

STOCK HOLDING CORPORATION OF INDIA LIMITED
PROJECT METHODOLOGY

SYNTHESIS AND ANALYSIS

***INFORMATION GATHERED AND PROCESSED
BY A TEAM OF EXPERTS IN :***

TRADE COMPARISON

CLEARANCE

SETTLEMENT AND DEPOSITORY

(MANAGEMENT, DESIGN AND IMPLEMENTATION AREAS)

INFORMATION TECHNOLOGY

***(OVERALL ASSESSMENT, WORLDWIDE EXPERIENCE AND
APPLICATION SPECIFIC ANALYSIS)***

LEGAL AND REGULATORY ANALYSIS

***TRAINING, EDUCATION, HUMAN RESOURCE,
AND ORGANIZATIONAL THEORY***

STOCK HOLDING CORPORATION OF INDIA LIMITED
INDIAN SECURITIES INDUSTRY PLAYERS

RESERVE BANK OF INDIA (RBI)

The Central Bank

SCHEDULED BANKS

Performing normal commercial banking functions

DEVELOPMENT BANKS

And similar institutions channelling funds into public and private sector

INSURANCE COMPANIES

*Government owned
Life insurance, General insurance, etc.*

MUTUAL FUNDS

*Schemes of Unit Trust of India (UTI)
or sponsored by other Financial
entities*

STOCK EXCHANGES

23 exchanges (including OTCEI)

SHCIL

Mofussil, Badlawallas, Others

BROKERS

TRANSFER AGENTS/ REGISTRARS

SECURITIES & EXCHANGE BOARD OF INDIA (SEBI)

INVESTING INDIAN PUBLIC

STOCK HOLDING CORPORATION OF INDIA LIMITED
CHARACTERISTICS - INDIAN SECURITIES MARKET

GOVERNMENT ENTITY DOMINATION

**RETICENCE OF FINANCIAL INSTITUTIONS TO BE THE VILLAINS
FOR PUBLIC'S FINANCIAL LOSSES**

GRADUAL ACCEPTANCE OF FREE MARKET ECONOMY

LACK OF PUBLIC CONFIDENCE IN SECURITIES INDUSTRY INSTITUTIONS

MUTUAL FUNDS POPULAR MEDIUM FOR PUBLIC (NOT DIRECT)

DIRECT PUBLIC PURCHASES - MORE A LOTTERY (THAN INVESTMENT)

SECURITIES INDUSTRY REGULATION YET IN A FORMATIVE STAGE

NON-COMPLIANCE WITH GROUP OF 30 RECOMMENDATIONS

**DIFFICULT TO ESTIMATE POTENTIAL SIZE OF INVESTING PUBLIC
GIVEN POSITIVE STRUCTURAL CHANGES BEING ADVOCATED**

**STOCK HOLDING CORPORATION OF INDIA LIMITED
ISSUES TO BE RESOLVED (PARTIAL LIST)**

**WHO
SHOULD BELONG TO
TO THE DEPOSITORY
?**

**WHO
SHOULD OWN
THE DEPOSITORY
?**

**WHO
SHOULD
BE ON THE
BOARD
?**

**HOW
SHOULD THE DEPOSITORY
HOLD SCRIPS
?**

**HOW
SHOULD THE INTERFACE
WITH STOCK EXCHANGES
BE DONE
?**

**WHEN
SHOULD SHCIL
OFFER AND OPERATE A
TRADE COMPARISON SYSTEM
?**

**WHAT
SHOULD SHCIL DO
FIRST
?**

**HOW
SHOULD
SHCIL
CONTINUE
?**

**WHAT
SHOULD SHCIL DO ABOUT
IT'S CUSTODIAN FUNCTIONS
ONCE IT ASSUMES ROLE OF
NATIONAL CLEARING SETTLEMENT
AND DEPOSITORY ENTITY
?**

**WHAT
ARE THE FUTURE ROLES OF :
THE TRANSFER AGENT
THE REGISTRAR
THE BANK CU?**

LEARNING FROM HISTORY STRATEGIC PLANNING

**LESSONS AND SUCCESSES
TO BE LEARNED BY INDIA FROM OTHER MARKETS
FOR CLEARING, SETTLEMENT
AND CENTRAL DEPOSITORY**

EXPERIENCE:

**UNDERSTANDING CONSTRAINTS
FROM CURRENT MARKETPLACE**

CASE STUDY FROM:

**UK
MALAYSIA**

RECOMMENDATION FOR INDIA

DEVELOP FIRM STRATEGY

DO NOT ATTEMPT TO COPY

OBSERVE LIMITATIONS OF LEGAL FRAMEWORK

RECOGNISE LIMITATIONS OF TELECOMMUNICATIONS, ETC.

DO NOT ATTEMPT TO RE-WRITE HISTORY OVERNIGHT

LEARNING FROM HISTORY IMPLEMENTATION

**LESSONS AND SUCCESSES
TO BE LEARNED BY INDIA FROM OTHER MARKETS
FOR CLEARING SETTLEMENT AND
CENTRAL DEPOSITORY ENVIRONMENT**

EXPERIENCE:

**UNDERSTANDING THE
IMPLEMENTATION CONSTRAINTS**

CASE STUDY FROM:

HONG KONG

RECOMMENDATION FOR INDIA

PUBLIC RELATIONS PROGRAMME

MANAGE VESTED INTERESTS

QUALITY SIMPLISTIC SOLUTIONS

**LEARNING FROM HISTORY
CAPITAL REQUIREMENTS**

**LESSONS AND SUCCESSES
TO BE LEARNED BY INDIA FROM OTHER MARKETS
FOR CLEARING, SETTLEMENT AND
CENTRAL DEPOSITORY ENVIRONMENT**

EXPERIENCE:

CAPITAL REQUIREMENTS

CASE STUDY FROM:

**UK
MALAYSIA
ARGENTINA**

RECOMMENDATION FOR INDIA

COST BENEFIT APPRAISAL

FINANCIAL ANALYSIS

AVOID SHORT CUTS

**LEARNING FROM HISTORY
PROJECT MANAGEMENT METHODOLOGY**

**LESSONS AND SUCCESSES
TO BE LEARNED BY INDIA FROM OTHER MARKETS
FOR CLEARING, SETTLEMENT AND
CENTRAL DEPOSITORY ENVIRONMENT**

EXPERIENCE:

PROJECT PLANNING AND MANAGEMENT

CASE STUDY FROM:

**UK
MALAYSIA
TAIWAN**

HONG KONG

RECOMMENDATION FOR INDIA

FOLLOW ESTABLISHED METHODOLOGY

**STRATEGIC PLANNING
ANALYSIS AND DESIGN
DEVELOPMENT
IMPLEMENTATION**

**(DO NOT, FOR EXAMPLE:
SELECT HARDWARE FIRST)**

**LEARNING FROM HISTORY
UNDERSTANDING RISKS**

**LESSONS AND SUCCESSES
TO BE LEARNED BY INDIA FROM OTHER MARKETS
FOR CLEARANCE, SETTLEMENT AND
CENTRAL DEPOSITORY ENVIRONMENTS**

EXPERIENCE:

UNDERSTANDING THE RISKS

CASE STUDY FROM:

ARGENTINA

RECOMMENDATION FOR INDIA

RISK MANAGEMENT OF

CURRENT MARKET

NEW ENVIRONMENT

**(THE DEPOSITORY COULD BE THE
ONLY RECORD OF HOLDINGS)**

**LEARNING FROM HISTORY
HUMAN RESOURCE REQUIREMENTS**

**LESSONS AND SUCCESSES
TO BE LEARNED BY INDIA FROM OTHER MARKETS
FOR CLEARING, SETTLEMENT AND
CENTRAL DEPOSITORY ENVIRONMENTS**

EXPERIENCE:

HUMAN RESOURCE REQUIREMENTS

CASE STUDY FROM:

**TAIWAN
MALAYSIA**

RECOMMENDATION FOR INDIA

**A STRATEGIC PROJECT AT THE
NATIONAL LEVEL**

**REQUIRES THE BEST HUMAN RESOURCES
OF THE NATION**

NO COMPROMISE ON QUALITY

**LEARNING FROM HISTORY
ACHIEVABILITY**

**LESSONS AND SUCCESSES
TO BE LEARNED BY INDIA FROM OTHER MARKETS
FOR CLEARING, SETTLEMENT AND
CENTRAL DEPOSITORY ENVIRONMENT**

EXPERIENCE:

ACHIEVABILITY

CASE STUDY FROM:

**UK
SINGAPORE**

RECOMMENDATION FOR INDIA

RECOGNISE WEAKNESSES

KEEP IT SIMPLE

LEARN FROM THE PREVIOUS EXAMPLES CITED

”ROME

WAS NOT

BUILT

IN A DAY ”

STOCK HOLDING CORPORATION OF INDIA LIMITED

SECURITIES INDUSTRY STANDARDS

PHASED IMPLEMENTATION APPROACH

FOR INDIA

RECOMMENDATION	PRIORITY	ORDER
9 ISIN ISO MESSAGE STDS	H	1
3 CSD	H	2
5 DVP	H	2
6 SAME DAY FUNDS	H	2
7 ROLLING SETTLEMENT	H	5
1 DIRECT TRADE COMPARISON	H	6
2 INDIRECT TRADE COMPARISON	H	6
* 1 INTERNATIONAL CONVENTIONS	H	8
8 SECURITIES LENDING	L	9
4 TRADE NETTING	X	10
* 2 CROSS BORDER LINKS	X	10
* 3 INTERNATIONAL CSD	X	10
* 4 FOREIGN LISTINGS	X	10

• - FIBV RECOMENDATIONS

KEY: H - HIGH
M - MEDIUM
L - LOW

25

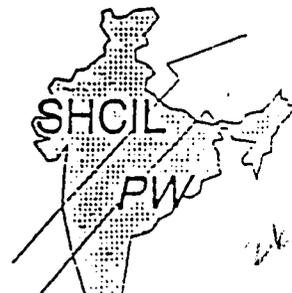
NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

PROPOSED COMPONENTS:

- = National Depository System (NDS)
- = National Trade Comparison and Reporting System (NTRS)
- = National Clearing System (NCS)

SUMMARY OF PRESENTATION

- = Characteristics of the system
- = Design of a depository system
- = National trade comparison system
- = National clearing system
- = Implementation strategy



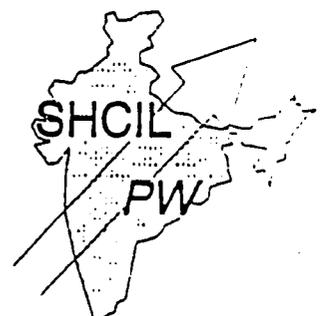
NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

COMPONENTS

Trade Comparison and Reporting Post trade execution activity that firmly establishes the terms and conditions of a trade contract.

Clearing The Post trade contract activity necessary to prepare for depository settlement.

Depository Settlement Transfer of ownership of securities in exchange for money



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

- = Characteristics of the system

A clearly defined Charter

- = A single national depository chartered by law offering:
 - Trade comparison and reporting services
 - Clearing services, and
 - Depository Book Entry Settlements
- Specifying the formats and media for trade comparison and clearing systems for stock exchanges which do their own.

**Segregate Custodian and Depository Business.
Segments into Separate Corporations --
Liability and Risk Issues**



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

USER INVOLVEMENT

- = Criteria and quality of user involvement
- = Operational Organisation of user involvement

User involvement is critical to the successful design and smooth implementation of NCDS



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

CRITERIA AND QUALITY OF USER INVOLVEMENT

Strong Participant Advisory Committees

Select top quality participants representing
all industry segments

- Brokers
- Institutions
- Banks
- Investors (domestic & foreign)
- Government
- Issuers & Privatised Companies
- Regulators
- Public Members

Committees Proposed

- Steering Committee -
strategy
- Legal & Regulatory sub-committee -
draft laws & rules
- Public Relations & Education sub-committee -
securities industry education and public information



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

OPERATIONAL ORGANISATION OF USER INVOLVEMENT

SHCIL STEERING COMMITTEE

SHCIL Executive
Important market
participants
External advisors
- Legal advisors
- Consulting

Legal & Regulatory Sub-Committee

SHCIL Executive
SEBI Representative
SHCIL Business &
Legal Advisors

PUBLIC RELATIONS SUB-COMMITTEE

SHCIL Executive
SHCIL Consulting advisors
SHCIL PR team



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

REGIONAL NEUTRALITY

- = Fear of Bombay Domination
- = Positive steps needed to ensure increased confidence throughout India
 - Diversity of Board of Directors
 - Regional Customer Service offices
 - Price Mutualisation

MOST IMPORTANT:

MANAGEMENT SENSITIVITY!!



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

INSURANCE

All accounts to be protected
against loss stemming from
NCDS error

- Government guaranteed
- Industry financed

Does not protect everything

- Excludes market price risk
- Pre-NCDS error

Limit on total financial compensation
for example, 1 lakh



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

Operation of NCDS

- = Self- supporting
- = Should generate revenue equal to expenses (including amortisation of capital investment)
- = Fee structure based upon several factors:
 - Accounts
 - Transactions
 - Reports Distributed
 - Need financing until operational book entry is reached
- = Capital Funding
 - Institutional Participant investment
 - Bank loans



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

ELIGIBLE SECURITIES

All listed and permitted securities

- Equities
- Preference Shares
- Debentures
- Government debt
- All future instruments
(see Pherwani Study Group
Report on new financial
instruments)

OBJECTIVE: *Minimise paper
handling costs in capital markets*



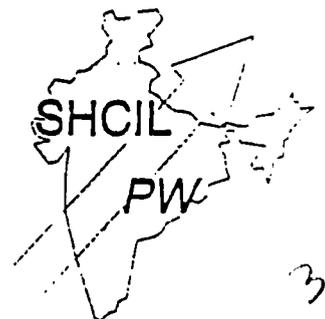
NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

COMPONENTS:

= National Depository System (NDS)

= National Trade Comparison and Reporting System (NTRS)

= National Clearing System (NCS)



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

The essence of a depository is the ability to transfer ownership of securities by book entry on ledgers without any physical movement of the scrip.

SHCIL

PW

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

THREE BASIC MODELS :

1. COMPLETE DEMATERIALISATION

2. BALANCE LEDGER WITHIN THE DEPOSITORY:

-Assumes scrips are in hands of the public.

-Two variations:

- a. No physical withdrawal permitted
- b. Physical Withdrawal permitted

3. IMMOBILISATION OF PHYSICAL CERTIFICATES WITHIN THE DEPOSITORY

-Assumes that scrips are in hands of the public and in inventory in the depository



KEY ASSUMPTION -

All three models assume one principal rule --

**ALL EXCHANGE TRADED SETTLEMENTS
ARE MANDATED TO BE BY BOOK ENTRY
ONLY FOR ALL DEPOSITORY ELIGIBLE
SECURITIES.**



MODEL 1

COMPLETE DEMATERIALIZATION

- = INDIVIDUALS DO NOT KEEP SCRIPS
IN THEIR POSSESSION**

- = DEPOSITORY KEEPS LEDGER OF
OWNERSHIP OF SHARES UNDER ITS CONTROL**

- = ALL NEW ISSUES, INCL. PRIVATISATIONS
ARE POSTED DIRECTLY TO THE
DEPOSITORY RECORDS BY THE ISSUER
(GLOBAL CERTIFICATES CAN EXIST)**

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

MODEL 1 (Continued) COMPLETE DEMATERIALIZATION

= ADVANTAGE

- LEAST COSTLY TO IMPLEMENT
- MOST EFFICIENT PROCESS
- QUICKEST IMPLEMENTATION
- STRATEGICALLY SUPERIOR IN ASIA
- THE LONG TERM SOLUTION

= DISADVANTAGE

- GREATEST DEPARTURE FROM
PRESENT PRACTICE



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

MODEL 2

BALANCE LEDGER MAINTAINED IN THE DEPOSITORY

- = A SCRIPLESS ENVIRONMENT WITHIN THE DEPOSITORY
- = BALANCE LEDGER CONTAINS RECORDS OF OWNERSHIP OF SHARES THAT ARE WITHIN THE DEPOSITORY
- = PHYSICAL SCRIPS ARE CANCELLED BY REGISTRAR WHO INCREMENTS THE LEDGER BALANCE IN DEPOSITORY
- = DEPOSITORY IS SUBLEDGER OF REGISTER
- = BALANCE RECORD & REGISTER TALLIED DAILY
- = INDIVIDUALS MAY KEEP PHYSICAL SCRIPS IN THEIR POSSESSION UNTIL THEY TRADE

- PHYSICAL WITHDRAWALS MAY OR MAY NOT BE PERMITTED



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

MODEL 2(Continued)

BALANCE LEDGER MAINTAINED
IN THE DEPOSITORY

ADVANTAGES

AVOIDS LARGE CAPITAL & OPERATING COSTS
INVOLVED IN VAULTING, MICROFILMING, &
INVENTORY CONTROL OF SCRIPS

CLOSELY APPROXIMATES MODEL 1 IN COST
AND EFFICIENCY

ACCOMMODATES THOSE WHO INSIST ON
HOLDING SCRIP



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

MODEL 3

IMMOBILISATION OF SCRIPS IN THE DEPOSITORY

- = BOOK ENTRY RECORDS ARE SUPPORTED BY INVENTORIES OF SCRIPS HELD IN VAULTS AT THE DEPOSITORY
- = BOOK ENTRY SETTLEMENTS ARE MADE AS IN MODELS 1 & 2
- = EXTENSIVE PROCEDURES FOR DEPOSITS, WITHDRAWALS, VAULTING, & INVENTORY CONTROL



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

MODEL 3 (Continued)

IMMOBILISATION OF SCRIPS IN THE DEPOSITORY

ADVANTAGES

**LEAST DEPARTURE FROM CURRENT
CUSTOMS**

DISADVANTAGES

**MOST EXPENSIVE TO BUILD AND
OPERATE**

HIGHEST COST TO THE CAPITAL MARKETS

MOST COMPLEX TO MANAGE AND CONTROL

HIGHER LEVEL OF SYSTEMIC RISK



SCRIP HANDLING

MODEL

	1	2a	2b	3
Scripts may be in hands of public before trading	no	yes	yes	yes
Scripts physically in depository vault	no	no	no	yes
Scripts may be in hands of public after trading	no	no	yes	yes
SCRIPTS:	LEAST ----- MOST			

NATIONAL CLEARANCE &

DEPOSITORY SYSTEM (NCDS)

SHOLE
11/15/86

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

THERE ARE LARGE DIFFERENCES BETWEEN THE THREE OPTIONS IN
TERMS OF COMPLEXITY, COST OF CAPITAL
AND ON-GOING COST OF OPERATIONS INTO THE FUTURE.
(FROM PERSPECTIVE OF DEPOSITORY AND REGISTRAR)

<u>FUNCTION REQUIRED</u>	<u>OPTION 1</u>		<u>OPTION 2</u>		<u>OPTION 3</u>	
	<u>DEP</u>	<u>REG</u>	<u>DEP</u>	<u>REG</u>	<u>DEP</u>	<u>REG</u>
1. BOOK ENTRY ONLY INITIATIONS (NEW ISSUES) & CANCELLATIONS (MATURITIES & REDEMPTIONS)	YES	YES	YES	YES	NO	NO
2. SYSTEMS & PROCEDURES TO SUPPORT PHYSICAL DEPOSITS:	NO	NO	NO	YES	YES	YES
RECEIPT RECORDS	NO	NO	NO	YES	YES	YES
MICROFILMING	NO	NO	NO	YES	YES	YES
FORWARDING TO REGISTRAR	NO	NO	NO	YES	YES	YES
VALIDATING GOOD DELIVERY	NO	NO	NO	YES	YES	YES
RECEIPTS FROM REGISTRAR	NO	NO	NO	YES	YES	YES
3. RECONCILIATION-DEP. VS. REGISTRAR	YES	YES	YES	YES	YES	YES
4. SYSTEMS & PROCEDURES TO SUPPORT PHYSICAL WITHDRAWALS:	NO	NO	NO	NO/YES	YES	YES
PROCESS REQUEST	NO	NO	NO	NO/YES	YES	YES
FORWARD CERTIFICATE TO TRANSFER AGENT	NO	NO	NO	NO/YES	YES	YES
ADJUST INVENTORY RECORDS	NO	NO	NO	NO/YES	YES	YES
5. RECONCILIATION - DEP VS. REGISTRAR	YES	YES	YES	YES	YES	YES
6. VAULTING AND SECURITY PROCEDURES	NO	NO	NO	NO	YES	YES



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

RECOMMENDATIONS

Considerations:

- Complete dematerialisation is the ideal
 - Already exists in government debt market in India and other countries
- This ideal has been difficult to implement in equities markets
 - Investors preference for scrips
 - Vested interests in paper handling
- Impractical to expect millions of investors to turn in scrips in short term
- O.K. to require turning in scrips before stock exchange sale
- Holding scrips in depository (Model 3) far worse - more costly than other options (Model 1, 2a, 2b)



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

RECOMMENDATIONS

CONCLUSIONS:

- REJECT OUTRIGHT MODEL 3 (VAULT SCRIPS) -
FAR TOO COSTLY
-DEMATERIALIZED DEPOSITORY
- DETERMINE BY AUGUST IF PREPONDERANCE OF
OF INDIAN PUBLIC AND VARIOUS INTERESTS
CAN ACCEPT NOT HAVING PHYSICAL SCRIPS
-IF SO, GRADUALLY GO TO SCRIPLESSNESS
 - EXISTING ISSUES:
MODEL 2A (KEEP SCRIP UNTIL TRADED;
CANNOT WITHDRAW)
 - NEW ISSUES:
MODEL 1 (COMPLETE DEMATERIALIZATION)
- IF NOT, ADOPT MODEL 2B (WITHDRAWALS OF
SCRIPS O.K.)
- TIME IS OF THE ESSENCE; ANY MODEL IS BETTER
THAN NONE
- THESE RECOMMENDATIONS PROVIDE COMPLETE
FUNGIBILITY OF SECURITIES WITHIN THE
DEPOSITORY BY THE DEVICE OF DEMATERIALIZATION



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

ACCOUNT STRUCTURE

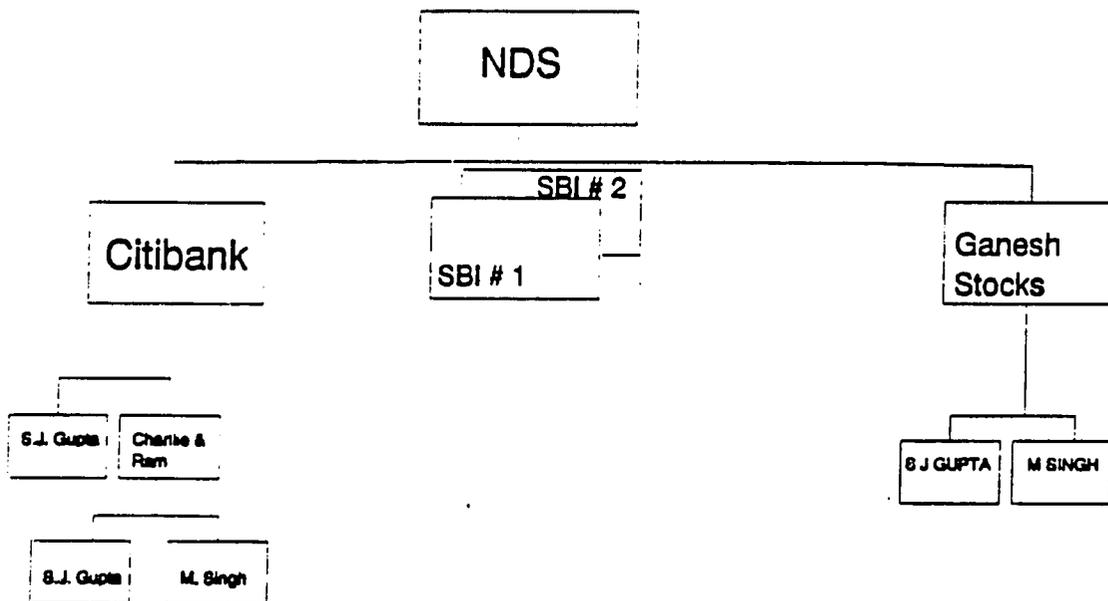
Who may have accounts in the depository?

<i>SECURITIES INDUSTRY PARTICIPANTS</i>	<i>INDIVIDUAL INVESTORS</i>
Brokers	Individual persons
Banks	Guardians of Minors
RBI	Joint Holders
Insurance Companies	Legal representatives
Mutual Funds	Corporate Bodies
Stock Exchange	Associations
- (clearing cells)	HUF



SECURITIES INDUSTRY PARTICIPANTS

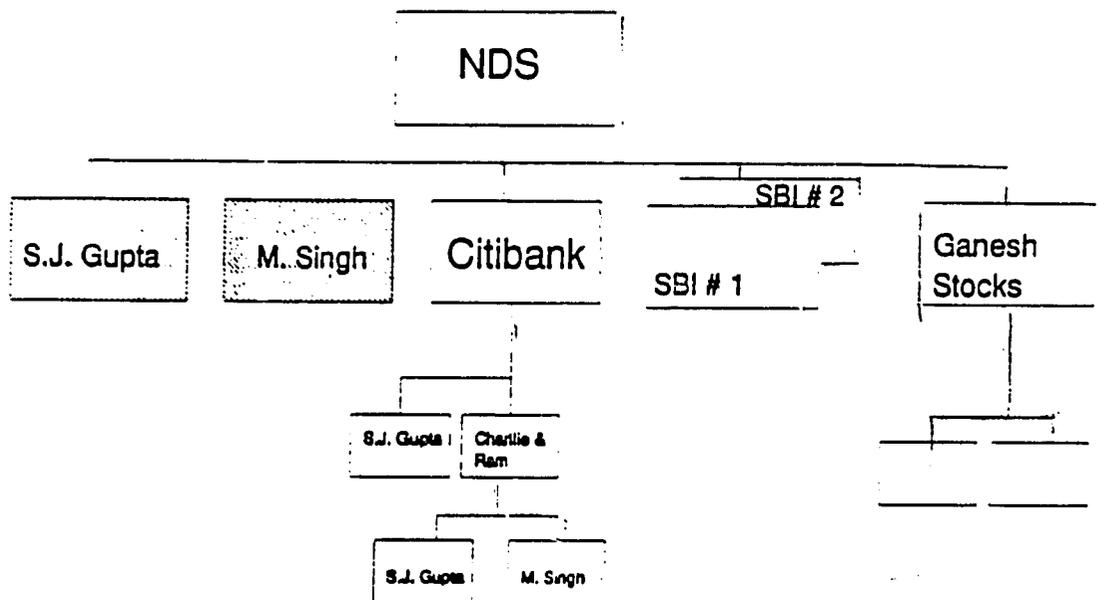
with Sub-accounting for their customers
and individual investors



- Sub-accounts are at the option of the direct account holders
- No linkage between accounts for the same person in different entities

SECURITIES INDUSTRY PARTICIPANTS

with Sub-accounting for their customers
and individual investors



- Sub-accounts are at the option of the direct account holders
- No linkage between direct individual investor accounts and accounts for the same person in different entities

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

PROPOSED COMPONENTS:

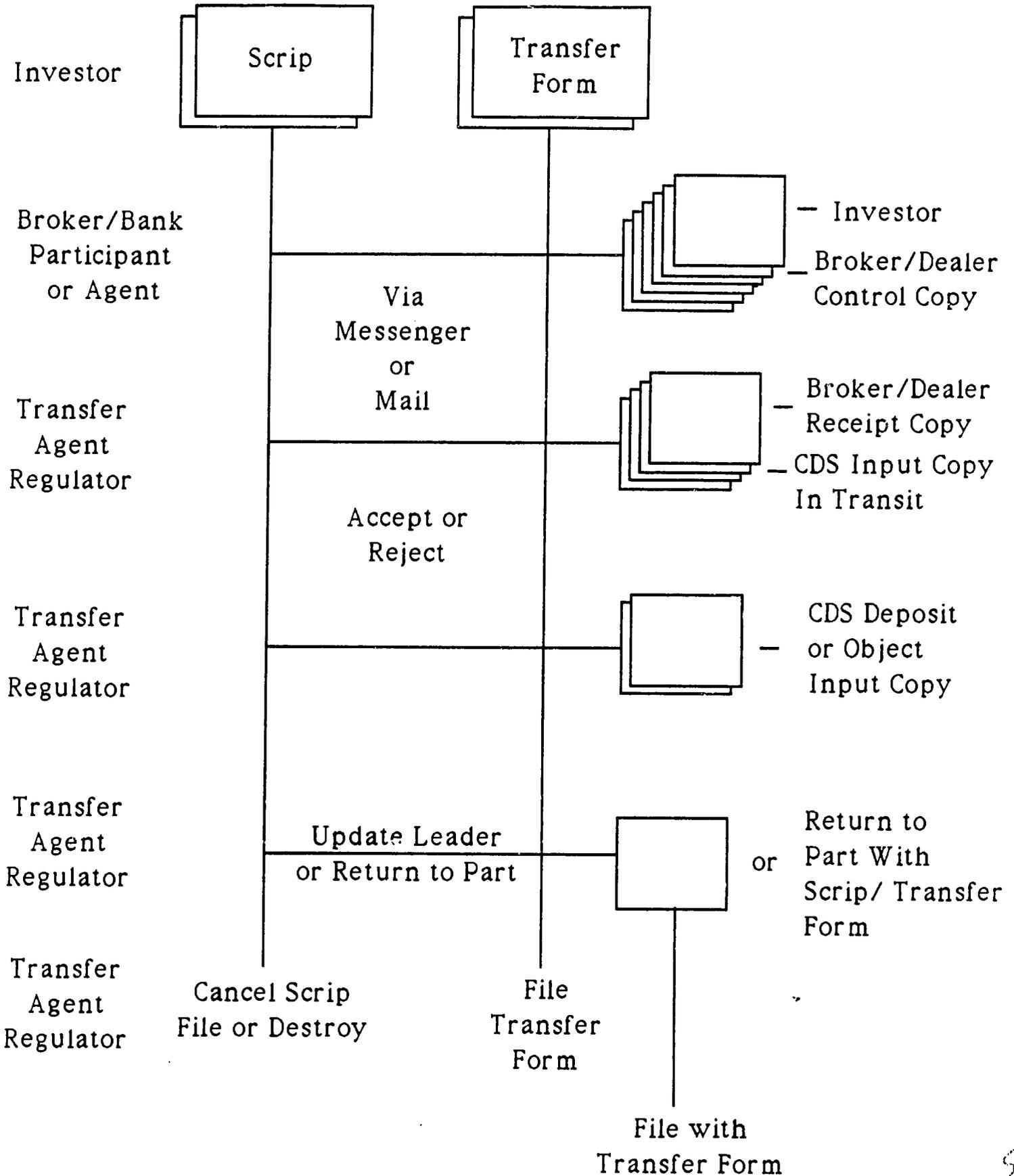
- National Depository System (NDS)
- National Trade Comparison and Reporting System (NTRS)
- National Clearing System (NCS)

SUMMARY OF PRESENTATION

- Characteristics of the system
- Design of a depository system
- National trade comparison system
- National clearing system
- Implementation strategy



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

ACCOUNT STRUCTURE RECOMMENDATION

- **Structure accounts for both securities industry participants and individual investors**

- **Individual investors can access their accounts only through the facilities of securities industry participants**

- **Centralised control of Participant numbering scheme is needed - SHCIL to do**
 - **A broker holding cards on two Exchanges must be indentifiable as the same entity if the participant wishes consolidate depository positions**

 - **Consistency of a participant identification is critical to efficient data processing**

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

BENEFICIAL OWNER RECORD-KEEPING

o WHO

- Registrar for Scrips in hands of public
- Depository
 - Individual investors
 - Securities industry participants with depository sub-accounting
- Securities industry participants of depository which do their own sub-accounting

o SIGNIFICANCE

- All the above must supply their beneficial owner files to registrars for dividend disbursement and other mailings
- SHCIL to control data format standards

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

ELIGIBILITY REQUIREMENTS

o SECURITIES INDUSTRY PARTICIPANTS

- Minimum net capital requirements
- Satisfactory compliance with regulations for customer account administration
- Deposit accounts to guarantee performance

o INDIVIDUAL INVESTORS

- Minimum requirements to prevent fraud

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

BOOK ENTRY OWNERSHIP TRANSFER

- **BOOK ENTRY OWNERSHIP TRANSFER
TRANSACTIONS MAY BE EITHER FREE OR
FOR MONEY (VALUE)**
 - If free money may be indirectly involved, such as payment by check between buyer and seller, handling of money is completely transparent to depository
 - Money may not be involved at all as in the case of an investor changing custodian banks for his portfolio
 - If for money, a value transaction, then there must be adequate guarantees that same day payment will be possible

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

BOOK ENTRY OWNERSHIP TRANSFER (CONTINUED)

- **OPTIONS INCLUDE:**
 - On line debit to bank account
 - Computerised verification that the depository has cash or satisfactory collateral in buyer's depository funds account

- **PRINCIPLE IS THAT DEPOSITORY NEVER RISKS THAT VALUE TRANSACTIONS MUST BE REVERSED FOR LACK OF SETTLEMENT FUNDS**

- **WE RECOMMEND COMPUTER VERIFICATION AS THE MOST RAPIDLY IMPLEMENTABLE**

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

DEPOSITORY SETTLEMENT - CASH

- o **BY DEFINITION DEPOSITORY SETTLEMENT IS THE EXCHANGE OF SECURITIES FOR MONEY BY BOOK ENTRY IN THE DEPOSITORY**
 - While it is possible to settle funds outside the depository ownership transfer system, this is an extra process that is inherently inefficient when the same process will accomplish both scrip and money transfers
 - The needs are easy to define
 - All payments are made to or received from the depository (or agent bank) in good same day funds no later than the same day that book entry ownership transfer takes place
 - A single money movement transaction (to or from the depository) on a net due to or from basis, is the most efficient in the Indian environment
 - Once the fund movements are made they are final, save only for rules governing clerical and computer errors
 - Implementation specifics will require more research

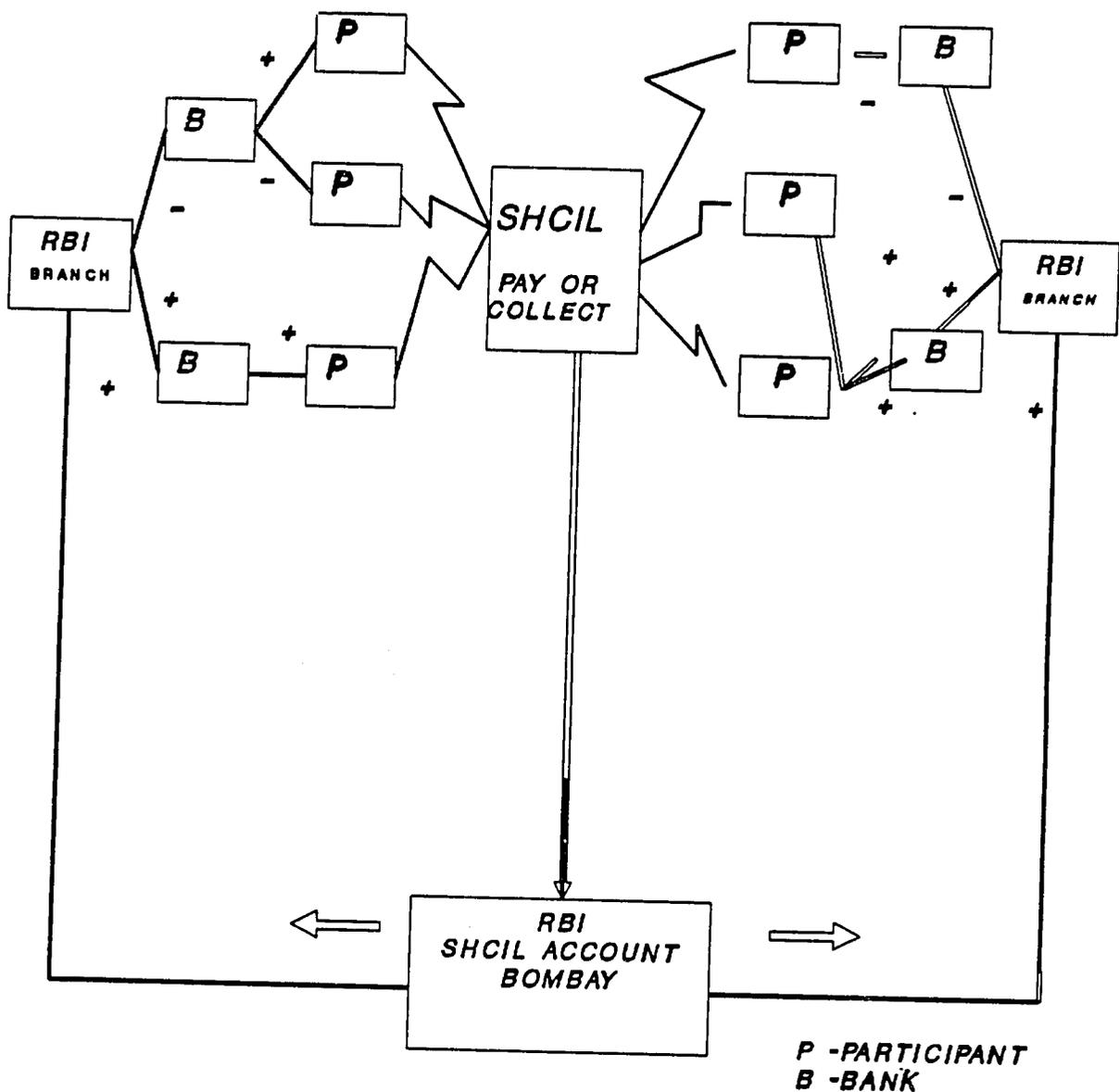
NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

RECOMMENDATIONS

- o SHCIL SHOULD HANDLE ITS OWN MONEY SETTLEMENT FUNCTIONS, WITHOUT USING AN AGENT BANK, IN ORDER TO MAINTAIN NEUTRAL BANKING RELATIONSHIPS WITH ALL BANKS,
- o SHCIL SHOULD BE ALLOWED TO ESTABLISH ACCOUNTS IN RBI BRANCHES THROUGHOUT INDIA
 - Local NDS participants can move funds through their local banks and through the local RBI branch
 - RBI branches can move funds through the RBI money movement system at SCHIL's direction to net each day's movement to zero
- o IF SHCIL CANNOT ACQUIRE ACCOUNTS IN RBI, IT CAN USE ANY BANK THAT CAN GET MONEY MOVED THROUGHOUT INDIA ON THE SAME DAY.

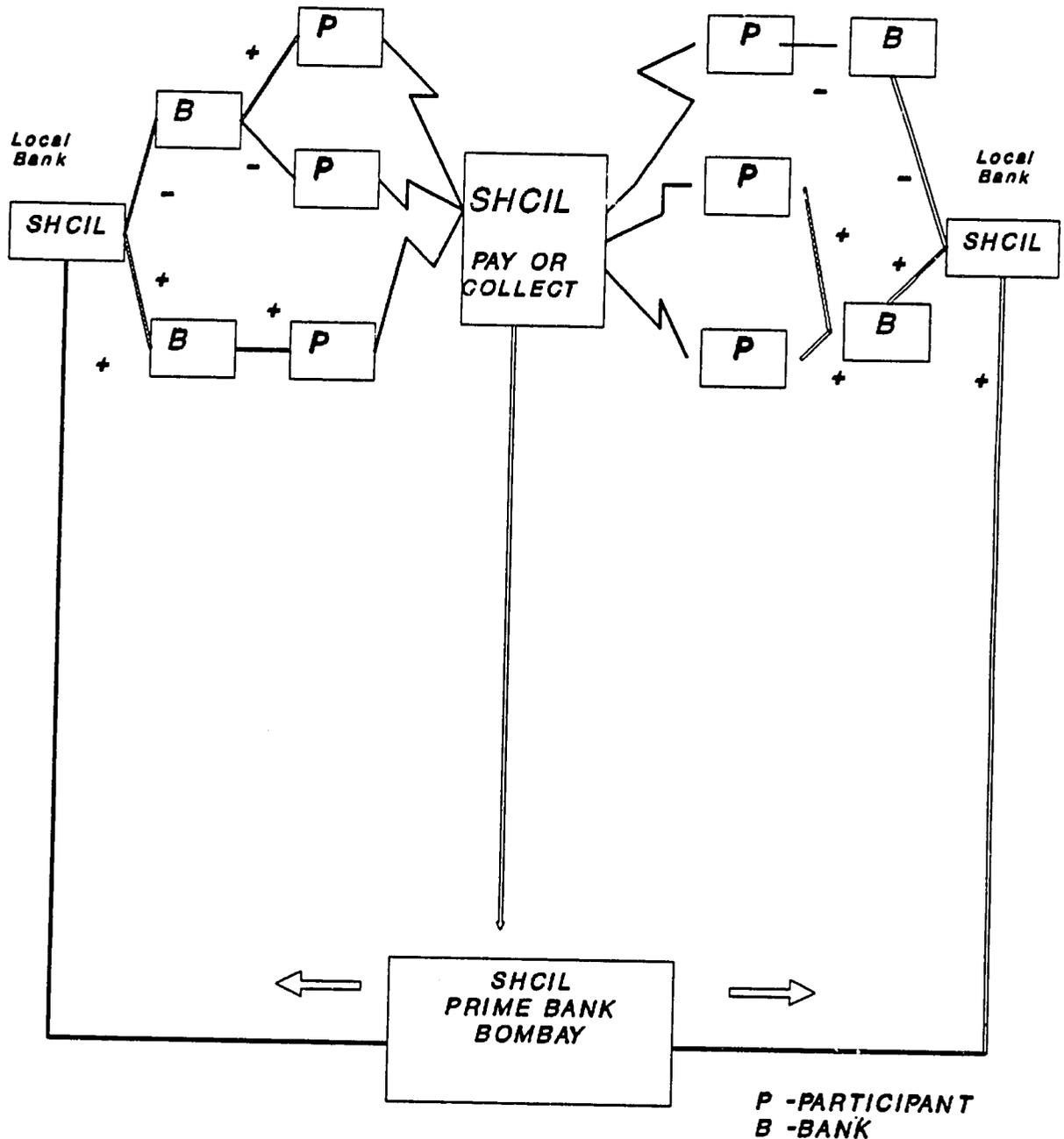
**NATIONAL DEPOSITORY SYSTEM
PROPOSED MODELS FOR MONEY SETTLEMENT
END OF DAY PROCESSING**

MODEL 1 : USING RBI SHCIL ACCOUNT



**NATIONAL DEPOSITORY SYSTEM
PROPOSED MODELS FOR MONEY SETTLEMENT
END OF DAY PROCESSING**

MODEL 2 : USING SHCIL'S PRIME BANK



NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

CASH ONLY MOVEMENTS

- o **BECAUSE A PAYMENT MECHANISM WILL EXSIST IN THE NDS, A CASH ONLY MOVEMENT SERVICE SHOULD BE OFFERED**

- Example:

The making and repayment of loans and charging the usage fees for service by the depository to its participants

- Transactions moving funds from the sender to the receiver result in the adjustment of end-of-day pay and collect amounts.
- The cash only movement facility, the free scrip movement facility and the value scrip movement facility combined eventually will make it unnecessary for securities and funds movements to occur in clearing systems and greatly simplify the record-keeping needs of the securities industry participants

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

SCRIP HYPOTHECATION

- **HYPOTHECATION: THE PLEDGING OF COLLATERAL BY A BORROWER TO A LENDER WITHOUT THE LENDER TAKING PHYSICAL POSSESSION OF THE COLLATERAL**

SCRIPS IN THE NDS DO NOT PHYSICALLY EXIST. LOANS THEREFORE, USING SCRIPS AS COLLATERAL, MUST BE HYPOTHECATED TO THE LENDER

- **FUNDAMENTAL PRINCIPLE:**

THE LENDERS RIGHTS TO THE COLLATERAL IN CASE OF REPAYMENT DEFAULT MUST BE IDENTICAL FOR HYPOTHECATED SCRIP AND FOR PHYSICALLY HELD COLLATERAL

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

SCRIP HYPOTHECATION (CONTINUED)

o IMPLICATIONS:

- NDS must provide operational and transactional facility to permit hypothecation
 - The hypothecated scrip must be under the control of the lender as long as he has a lien on it
 - The lender must have a transactional facility to release control of the scrip to the borrower when the loan is repaid
 - All of this must be done by book entry transactions on ledger accounts of the NDS
- There must be a legal, regulatory, and contractual framework to permit hypothecation
- Rights during period of lien remain with the beneficial owner

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

ADDITIONAL CONSIDERATIONS

- o **THE DISTINCTION BETWEEN SPECIFIED AND UNSPECIFIED SECURITIES HAS NO MEANING IN THE NDS. IF ANY PROCESSING OR PROCEDURAL HANDLING DISTINCTIONS NEED TO BE MADE THEY ARE DONE IN THE CLEARING SYSTEM; THE "A" GROUP AND "B" GROUP DIFFERENCES ARE TRANSPARENT TO THE DEPOSITORY**

THERE IS NO DISTINCTION IN THE NDS BETWEEN MARKETABLE LOTS, ODD LOTS, AND SHORT LOTS

- **The same transactions move all lots with equal ease**

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

NATIONAL TRADE COMPARISON SYSTEM (NTCS)

SHCIL RESPONSIBILITIES

- o **SPECIFICATION OF REQUIREMENTS OF
NTS TO STOCK EXCHANGES FOR
REPORTING COMPARED TRADES**
 - Timing of reporting
 - Format of reporting
 - Media
 - Layout
 - Offering operational trade comparison service consistent with above specifications
 - Interexchange trades
 - Service for any stock exchange that requests SHCIL services rather than doing it for itself
 - Interface to NCS
 - Potential interface to consolidated tape recording
 - Output of NTS is input to NCS

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

NATIONAL TRADE COMPARISON SYSTEM (NTCS), CONTINUED

o INSTITUTIONAL TRADES

- In addition to stock exchange executed trades, the SHCIL trade comparison system should offer service for broker/institutional (customer side) trades.
- These compares trades are then inputted to the NCS just like street side trades

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

TARGET STRUCTURE: NATIONAL CLEARING SYSTEM (NCS)

SHCIL RESPONSIBILITIES

o SPECIFY TIMING

- Rolling settlement (t+x)
- International standards (T+3 or better)

o SPECIFY FORMAT OF REPORTING

- Media
- Layout

o OFFER CLEARING SERVICES CONSISTENT WITH ABOVE SPECIFICATIONS

- For all trades for which SHCIL has performed trade comparison and reporting
- For exchange-supplied valid (locked-in) trades

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

**WHAT ARE THE PRINCIPLES OF THE SHCIL-OFFERED
CLEARING SERVICE?**

- o **SIMPLE, STRAIGHT-FORWARD TRADE FOR
TRADE (T/T) CLEARING**
 - Low cost
 - Simplest operationally
 - Quickest to implement
 - Easiest to audit

**WHAT ABOUT SYSTEMS LIKE NET
BALANCE ORDERS AND CONTINUOUS NET
SETTLEMENT?**

- NDS can accept book entry scrip and cash movement transactions generated by any type of clearing system
- This assumes consistent formats as discussed above

**THERE IS NO NEED FOR SHCIL TO GET INTO
DEBATES ON THE ADVANTAGES AND
DISADVANTAGES OF DIFFERENT CLEARING
SYSTEMS**

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NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

**WHAT ARE THE PRINCIPLES OF THE SHCIL-OFFERED
CLEARING SERVICE?**

**IN THE LONG RUN THE ECONOMICS WILL LEAD
EXCHANGES TOWARD EFFICIENT CLEARING**

**POLICIES GOVERNING BADLA FINANCING, BADLA
STOCK LENDING, MARGINING, AND OTHER
POTENTIALLY CONTROVERSIAL ISSUES CAN BE
LEFT TO SEBI AND THE EXCHANGES WITHOUT
SLOWING DOWN THE IMPLEMENTATION OF NCDS**

**ONE ADVANTAGE OF THE CURRENT NETTING
SYSTEM IS THE ABILITY TO RAPIDLY CHANGE TO
INTERFACE WITH NCDS**

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

IMPLEMENTATION STEPS FOR NCDS

- o START OPERATION OF DEPOSITORY, IF POSSIBLE, WITH A DEMATERIALISED NEW ISSUE**
- o PROGRESS TO CONVERSION OF CURRENT ISSUES COMMENCING WITH LOW VOLUME SECURITIES**
- o PROGRESS TO CONVERSION OF HIGH VOLUME SECURITIES**
- o ACCEPT VALID TRADE CONTRACTS FROM STOCK EXCHANGE CLEARING SYSTEMS FOR SETTLEMENT**
- o ONCE DEPOSITORY ELIGIBILITY IS COMPLETE SHCIL OFFERS TRADE COMPARISON AND CLEARING SERVICES WITH DIRECT SETTLEMENT IN DEPOSITORY FOR DEPOSITROY ELIGIBLE ISSUES**
- o ACCEPT VALID TRADE CONTRACTS FROM STOCK EXCHANGE FOR CLEARING AND SETTLEMENT IN THE DEPOSITORY**

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

RATIONALE FOR IMPLEMENTATION SEQUENCE

o WHY NDS FIRST?

- Biggest payback in shortest amount of time
 - Starts to eliminate scrip handling
 - Gains public acceptance by elimination/reduction of registration delays

- Gives SHCIL nationwide credibility fastest with minimum of potential controversy
 - Minimum change to existing trade comparison systems
 - Minimum change to existing clearing systems
 - NDS is the key to making progress in group of 30 recommended standards

NATIONAL CLEARANCE & DEPOSITORY SYSTEM (NCDS)

SPECIFICS OF NDS IMPLEMENTATION STRATEGY

- o **ACQUIRE MANDATE FOR BOOK ENTRY
STOCK EXCHANGE TRADING SETTLEMENT**
- o **SYSTEMS/OPERATING PROCEDURE DEVELOPMENT**
- o **SHAKEDOWN SYSTEMS**
 - One new issue/privatisation
 - Preferably completely dematerialised
- o **CONTINUE SHAKEDOWN**
 - One existing issue
 - Work out balance ledger concepts/transfer procedures
- o **ADD LOW VOLUME ISSUES**
- o **ADD HIGH VOLUME ISSUES**

PRINCIPAL COMMERCIAL LAW ISSUES CONCERNING DEPOSITORY ESTABLISHMENT

- SETTLEMENT BY BOOK ENTRY
- VESTING OF BENEFICIAL OWNERSHIP RIGHTS
- TITLE ISSUES
- PLEDGES & RELEASES OF PLEDGES
- FUNGIBILITY

SETTLEMENT BY BOOK ENTRY

- **PRESENT SYSTEM ALLOWS TRANSFER OF RIGHTS ONLY BY CERTIFICATE AND TRANSFER DEED**

- **NEED TO ALLOW SETTLEMENT (TRANSFER OF RIGHTS) BY BOOK ENTRY**

- IMMOBILISATION - DEPOSITORY HOLDS TECHNICAL LEGAL TITLE TO SHARES; BENEFICIAL OWNERSHIP IS TRANSFERRED BY BOOK ENTRY**

- DEMATERIALISATION/BALANCE ORDER SYSTEM**

- RIGHTS OF SECURITIES EVIDENCED BY WRITTEN DOCUMENT THAT IS NOT AN INSTRUMENT OF TITLE**

- TOTAL AMOUNT HELD BY DEPOSITORY RECONCILED WITH REGISTRAR**

- FURTHER REVIEW REQUIRED BY INDIAN COUNSEL**

- SIMILAR CONCEPT COULD BE ACHIEVED BY HAVING ONE 'GLOBAL' OR 'BALANCE ORDER' CERTIFICATE**

VESTING OF BENEFICIAL OWNERSHIP RIGHTS

- ISSUE IS WHETHER RIGHTS OF MEMBERS OF COMPANY MUST PASS THROUGH DEPOSITORY OR PASS DIRECTLY
- WE RECOMMEND -
 - DIRECT VESTING OF BENEFICIAL OWNERSHIP RIGHTS WITH HOLDERS AS SHOWN IN DEPOSITORY'S RECORDS
 - HOLDERS VOTE DIRECTLY
 - DEPOSITORY FURNISHES LIST TO REGISTRAR

TITLE ISSUES

- PERSONS CREDITED WITH SECURITIES THROUGH BOOK ENTRY BECOME BONA FIDE PURCHASERS
- CREDIT FOR SECURITIES (TITLE PASSAGE) GIVEN ONLY AFTER CONFIRMATION THAT CASH/COLLATERAL ACCOUNT IS SUFFICIENT
- INSTITUTIONAL PARTICIPANTS WOULD TRANSFER TO SUBACCOUNTS AT END OF EACH DAY

PLEDGES AND RELEASE OF PLEDGES

- **EFFECTED THROUGH BOOK ENTRY**

- PRESENT LAW REQUIRES CUSTODY;
BANKS MUST REGISTER IN THEIR NAMES

- UNDER BOOK ENTRY SYSTEM, HOLD WOULD BE
PLACED ON ACCOUNT AND PLEDGEE AUTHORIZATION
WOULD BE REQUIRED FOR TRANSFER

FUNGIBILITY

- **PRESENT LAW REQUIRES A SPECIFIC CERTIFICATE TO BE TRANSFERRED**
- **USING THE FUNGIBILITY CONCEPT:
A PERSON WHO HOLDS THROUGH THE DEPOSITORY DOES NOT HAVE TITLE TO SPECIFIC SECURITIES, BUT HAS TITLE TO SECURITIES OF THE NUMBER, TYPE AND CLASS SHOWN IN RECORDS**
- **THIS PERMITS TRANSFER TO BE MADE AMONG PARTICIPANTS' ACCOUNTS IN BULK AND ON A NET BASIS**

SPECIAL CONCERNS UNDER INDIAN LAW

- COMPANIES ACT, SECTION 111, SECURITIES CONTRACTS (REGULATION) ACT, SECTION 22

- STAMP TAX

- MONITORING OF COMPLIANCE WITH OTHER ACTS (FERA, MRTPA)

- VARIOUS TECHNICAL PROVISION OF COMPANIES ACT AND OTHER LAWS

**COMPANIES ACT, SECTION 111, SECURITIES CONTRACT
(REGULATION) ACT, SECTION 22**

- **THESE SECTIONS PERMIT COMPANY TO REFUSE REGISTRATION OF TRANSFER IN CERTAIN CASES, INCLUDING WHEN TAKEOVER IS FEARED**
- **THESE SECTIONS CANNOT BE APPLICABLE TO BOOK ENTRY TRANSFERS; MANY TRANSACTIONS MUST TAKE PLACE BY BOOK ENTRY THROUGHOUT THE DAY WITHOUT CONSULTATION WITH THE ISSUER**
- **ALTERNATIVE--PERMIT BENEFICIAL OWNERSHIP RIGHTS TO PASS, BUT GIVE ISSUER POWER TO REVOKE VOTING RIGHTS THROUGH APPROPRIATE PROCESS**
- **THIS IS A KEY ISSUE. IF THESE PROVISIONS ARE APPLICABLE, DEPOSITORY IS UNWORKABLE. INTERNATIONALLY, DEPOSITORIES ARE NOT SUBJECT TO THESE RESTRAINTS.**

REGULATION

- **NEED TO ESTABLISH INVESTOR TRUST IN SYSTEM**
 - REDUCTION OF RISKS THROUGH SYSTEM DESIGN
 - INTERNAL CONTROL AND AUDITS
 - OVERSIGHT BY EFFECTIVE REGULATORY BODY
 - REMEDIES

REDUCTION OF RISKS

- IT IS NOT THE PURPOSE OF A DEPOSITORY TO ADDRESS MANY OF THE PROBLEMS IN SECURITIES MARKET
- GREATER EXPOSURE OF DEPOSITORY DUE TO LACK OF PRESENT REGULATION OF MARKET INTERMEDIARIES
- REDUCE MOST PAYMENT RISK BY NOT CREDITING ACCOUNT WITH SECURITIES UNTIL CASH/COLLATERAL ACCOUNT ON DEPOSIT IS SUFFICIENT

INTERNAL CONTROL AND AUDIT

- KEY REGULATORY TOOL
- NEED FOR REPUTABLE, INDEPENDENT ACCOUNTING FIRM:
- THOROUGH REVIEW ANNUALLY, TESTING THROUGHOUT YEAR BY BOTH INSIDE AUDIT DEPARTMENT AND INDEPENDENT FIRM

REGULATORY OVERSIGHT

- SEBI HAS AUTHORITY
- DEPOSITORY SHOULD BE SELF-REGULATORY ORGANISATION
- SEBI OVERSIGHT SHOULD FOCUS ON INSPECTIONS AND ENFORCEMENT
- SEBI NEEDS GREATER ENFORCEMENT POWERS
- SEBI IS NEW; MUST ESTABLISH REPUTATION IN COMMUNITY AS AN EFFECTIVE REGULATORY BODY

REMEDIES

- TO ACHIEVE USER CONFIDENCE, REMEDIES FOR FAILURES IN SYSTEM MUST BE PROVIDED

- SOURCES OF FUNDS:
 - PARTICIPANTS' FUND
 - INSURANCE
 - GOVERNMENT GUARANTEES

- EFFICIENT METHOD TO COLLECT

CASH SETTLEMENT

- **BANKING CONCERNS**

- **PROTECTION AGAINST DEFAULTS BY PARTICIPANTS**
 - PARTICIPANT CAPITAL REQUIREMENTS

 - LIENS' ON SECURITIES, CASH IN PROCESS AND OTHER ASSETS OF PARTICIPANTS

 - MARK TO MARKET PROCEDURES

 - PARTICIPANTS' GUARANTEE FUND

NEXT STEPS

- DECISIONS MUST BE MADE REGARDING STRUCTURAL MATTERS
- LEGISLATION MUST BE DRAFTED
- SEBI RULES MUST BE DRAFTED
- RULES FOR DEPOSITORY MUST BE DRAFTED

ANALYSIS OF SYSTEMIC RISK

- NATIONAL DEPOSITORY SYSTEM (NDS)
- NATIONAL TRADE COMPARISON SYSTEM (NTCS)
- NATIONAL CLEARING SYSTEM (NCS)

NATIONAL DEPOSITORY SYSTEM

SOURCES OF RISK:

- PARTICIPANTS
- STRUCTURE
- OPERATIONS

NATIONAL DEPOSITORY SYSTEM PARTICIPANT RISK

- MINIMUM STANDARDS
- OPERATIONAL PERFORMANCE
 - DAILY RECONCILIATION
 - PAY AND COLLECT PERFORMANCE
- BANKING RELATIONS
- CEASING TO ACT

NATIONAL DEPOSITORY SYSTEM STRUCTURE RISK

- ACCOUNT IDENTIFICATION
- SECURITY IDENTIFICATION
- DEMATERIALIZATION, IMMOBILIZATION VS. CERTIFICATE PROCESSING AND CUSTODY
- WITHDRAWAL RISK
 - DEMATERIALIZED (NO WITHDRAWAL)
 - DENOMINATIONAL CONTROL IN VAULT
 - CERTIFICATE LEVEL CONTROL IN VAULT
- VALUATION
- CASH VS. NO-CASH SETTLEMENT

NATIONAL DEPOSITORY SYSTEM OPERATIONAL RISK

- INTERNAL AND EXTERNAL RECONCILIATIONS
- DEPOSIT CREDIT TIMING
- PHYSICAL PROCESSING
 - ✓ DEPOSITS
 - ✓ WITHDRAWAL
 - ✓ SAFEKEEPING
 - ✓ IN-TRANSIT
- DIVIDENDS, RIGHTS, TENDERS
 - DEPOSITORY VS. REGISTRAR PROCESSING
 - TIMING
 - AGENT VS. PRINCIPAL
- PHYSICAL SECURITY
 - REAL RISK VS. CUSTOMER PERCEPTION
 - VAULT VS. NON-VAULT
- MONEY SETTLEMENT
 - CASH VS. NON-CASH
 - SINGLE BANK VS. MULTI-BANK
- INTERNAL AUDIT
- LIABILITY IN CASE OF ERROR

NATIONAL CLEARING SYSTEM
SOURCES OF RISK

- PARTICIPANTS
- STRUCTURE
- OPERATIONS

NATIONAL CLEARING SYSTEM
STRUCTURAL RISK

- **CLEARING TYPE**
 - TRADE FOR TRADE
 - BALANCE ORDER
 - CONTINUOUS NET SETTLEMEN

- **MARGIN/MARK TO MARKET PRO**
 - CONTRA PARTIES
 - CLEARING CORPORATION

NATIONAL CLEARING SYSTEM
OPERATIONAL RISK

- CURRENT PRICING
- MARGIN/MARK COLLECTION
- POSITION MONITORING
 - CONCENTRATION
 - FAILS

STOCK HOLDING CORPORATION OF INDIA LIMITED
SHCIL'S ROLE

BETWEEN NOW AND SECOND WEEK OF AUGUST

SHCIL SHOULD TAKE ALL STEPS NECESSARY

TO: ADDRESS THE ISSUES

MAKE APPROPRIATE CHOICES

PROVIDE FEED-BACK TO PRICE WATERHOUSE

**PARTICIPATE IN THE FINALIZATION
OF THE CONCEPTUAL MODEL FOR**

**CLEARING SETTLEMENT AND A CENTRALISED
DEPOSITORY SYSTEM**

SO A FINAL STRATEGIC PLAN CAN BE COMPLETED

**AND WORK CAN COMMENCE
ON THE FUNCTIONAL DESIGN**

ON SCHEDULE

STOCK HOLDING CORPORATION OF INDIA LIMITED
WHERE DO WE GO FROM HERE ???

June - July

SHCIL REVIEWS INTERIM REPORT, ISSUES

TRAINING OF SHCIL-SEBI-MIN. OF FINANCE TEAM

NEW YORK, CHICAGO, TAIWAN AND SINGAPORE

August

FINALIZE DECISIONS

PREPARE STRATEGIC PLAN

CONSULTATIVE MEETINGS

WITH INDUSTRY REPRESENTATIVES

VARIOUS LOCATIONS IN INDIA

TEAM PREPARES AND SUBMITS

FINAL VERSION OF STRATEGIC PLAN

September

PREPARATION OF FUNCTIONAL SPECIFICATION

October

PREPARATION OF INFORMATION TECHNOLOGY PLAN

November

DRAFT FINAL REPORT

SUBMIT FINAL REPORT