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# CHAPTER 1. MEANING OF STRAIGHT THROUGH PROCESSING (STP)

**Straight-through Processing** (**"STP"**) is a mechanism that automates the end-to-end processing of transactions of the financial instruments. It involves use of a single system to process or control all elements of the work-flow of a financial transaction, including what is commonly known as the Front, Middle, and Back office, and General Ledger. In other words, STP can be defined as electronically capturing and processing transactions in one pass, from the point of first 'deal' to final settlement.

Presently, each and every transaction involves costly multiple data re-entry from paper documents and other sources which are susceptible to errors, discrepancies, delays and possible fraud. Further, the traditional means and methods of capturing and processing of information such as phone, fax, email etc. requires human intervention which slows the entire cycle, introduces errors and delays settlement

The global securities industry is undergoing a period of dramatic change driven by increasing customer expectations. Centered on technological based business models and new regulations requiring reduced settlement cycles, the system demands a common solution to address the issues related therein. The technological advancements witnessed in the securities trading system coupled with the dynamicity of the capital market demands and ability to capture trade data once i.e. at the point of the investment decision and to process that decision electronically and seamlessly through order creation & compliance, trading, confirmation, settlement and finally into reconciliation

Usage of STP enables orders to be processed, confirmed, cleared and settled in a shorter time period, more cost effectively and with fewer errors. Apart from compressing the clearing and settlement time, STP also provides a flexible, cost-effective infrastructure, which enables e-business expansion through real-time processing and access to enterprise data. Thus STP may be defined as the end-to-end automation of financial transaction processing from pre-trade to post-settlement.

STP also streamlines back-office activities, leading to fewer failures, lower risks and drastically reduces costs per transaction. It embraces a set of applications, business processes and standards, which are set to revolutionize the settlement and processing standards within the capital markets industry. The working of STP requires the automation of nearly every process along the way, as well as application-to-application connectivity to allow integrated information flows. In addition to these, complete linkage with industry utilities, networks, business partners and industry standards is necessary in order to allow instantaneous communication. One may also examine the success of STP in the international arena.

# CHAPTER 2. INTERNATIONAL EXPERIENCE

The increasing volume of trades and the demand for more rapid settlement has made it essential for the market participants to enhance their processing efficiency in order to manage costs and minimize their exposure to risk. Globally, it is found that some big and the organized firms have developed their own integrated front middle and back office systems which communicate in a particular manner so that the information fed at one front automatically gets captured and processed at the other front also. This avoids the duplication of work, errors in data feeding and facilitates quick usage of the data for processing and report generation. Many big organizations have adopted STP for their inhouse functions. The level of automation is found to be diversified and is mostly dependent on the size of the organization, the business field, and the dynamicity of the management.

Internationally, STP can be found in use at the organization level or at the most at the closed group level. However, none of the markets in the world have adopted STP at broader level i.e. STP across the market including participation across the majority of the market participants. As such, no standards for messaging or for interoperability although attempted have been implemented that could be used for adopting STP across the market. The organizations using STP in their own organizational functions are using different messaging standards.

However, reduction of the trade-to-settlement times is now a widely agreed phenomenon. The markets across the world are looking forward to achieve the reduction of the settlement cycle from three days (T+3) to just one day (T+1). Coupled with the developments taking place to reduce the settlement cycle, the changing roles of the market intermediaries and the industry as a whole is compelling the securities institutions to focus on delivering the rapid and responsive customer service that will secure their global competitiveness.

Further, the economic justifications alone for T+1 is forcing the industry including the regulators, particularly when you look at how trade volumes are spiraling, to adopt the

means and methods for automation of the processes involved along the way. Industry figures reveal that the daily numbers and size of cross border equity transactions have doubled - and value at risk has quadrupled. Adding to the complications are the recent developments that have taken place in the capital markets wherein the mergers, acquisitions and other phenomena have changed the entire equation of the global capital markets. No more the barriers and the competition that used to prevail in the traditional days are applicable. These fronts further necessitate the usage of the automated systems that would not only facilitate the short settlement cycle but will provide benefits in many other ways like reduction in the cost, increased efficiencies, lessening of the risk etc.

Internationally it has been accepted that whether it is viewed as an obligation or an opportunity, markets will have no choice but to adopt the system; they will have to spend money to stay in business. This presents an ideal milestone to introduce STP at the same time.

However despite the inherent advantages in executing a seamless electronic communication and messaging system, varying system structures, message protocols and differing verification schedules and applications have made STP Service Providers as islands of information. There is STP but only within clients who are networked with one Service Provider. The issue of inter-operability between STP Service Providers has not been resolved.

### CHAPTER 3. NEED OF STP IN INDIA

In order to remain competitive in the global marketplace, today's markets across the world are striving to reduce costs and operational errors as well as speed up transaction handling. Straight through processing (STP), the automated end-to-end processing of transactions from trade inception to settlement, has become a business imperative for the markets. STP promises to streamline legacy systems and applications as well as inter and back-office applications.

The capital markets in India have witnessed a huge change in the last decade or so. The entire market structure has been redefined and so have the nature of market intermediaries. Securities' market have moved towards technology supported systems and practices. The Indian capital markets, have attained a remarkably high degree of growth in the last decade, are poised for a further leap forward over the next ten years. With the opening of the economy to multinationals and the adoption of more liberal economic policies, the economy is driven more towards the free market economy.

The trading volumes have been growing exponentially in the Indian markets and so is the number of products being traded, the number of investors and the number of market participants. The traditional open outcry system of trading has been left in the past and the market has adopted the electronic trading system. There has been a move from account settlement period to rolling settlement system. The settlement cycle has been gradually brought down from 15 days to just 2 days thus putting the Indian capital market in the elite group of advanced markets of the world.

The shortening of the settlement cycle requires the market to streamline the various processes and phases involved in order to achieve a faster, better, cost-effective and acceptable means and mode of system support and infrastructure. Further, with the technological advancements taking place in all the spheres of the system, the market seems to be reluctant to afford the higher cost, costly manual intervention and the most importantly the mistakes arising out of such duplication of work on account of manual intervention.

With the availability of the means and mechanism of faster, more efficient transactions, enterprises of all sizes aspiring to save valuable time and money, STP appears to be the solution to overcome the difficulties of the manual processing which could smoothly transcend into shorter settlement cycles. The following benefits of STP make it attractive to be adopted in the Indian context:

- *K* Facilitates shortening of the settlement cycle.
- *Market Increases transparency*
- *«* Avoids costly duplication of work and manual intervention
- *<i>
   Reduction in Risks and errors*
- Sector Se
- *Subscript Increases the overall efficiencies*
- Makes the market cost effective

## CHAPTER 4. STP COMMITTEE

The need for STP or any other mean to achieve a quicker, safer, economical and automated system in the Indian capital market was actually felt with the shortening of the settlement cycle, increase in the number of products traded and number of players who participated it the market. Coupled with the technical advancements taking place, the various limitations arising out of the traditional system of trading and settlement, compelled the industry to revisit the viability and feasibility of the systems they had been adopting. Sensing the need of the market, SEBI set up the Committee on 19-February-2002, to assess the feasibility and suitability of introducing STP in Indian markets. The committee was formed to propose a scheme of STP and undertaking a cost-benefit analysis of implementing STP in India.

The SEBI Committee for implementation of STP in Indian markets approached the matter under reference through the following steps:

- Identification of components of the current life-cycle of a trade that involves manual intervention
- Identifying and establishing messaging standards for information communication
- Identifying options for establishment of a communications backbone that will enable data transfer across participants in a secure and efficient manner.

In its approach, a sub-group comprising of some of the members of the committee was also formed to critically examine the available messaging standards and to recommend the messaging standards that would be most suitable. Further, a pilot project was convened to find out if STP would be successful was undertaken. The Committee was of view that there was a disparity between the market participants in terms of automisation. The committee made a comparison of the various processes involved in the trade cycle (both domestic and international) and identified the following areas which were needed to be automated on a priority basis:

- Post Trade activities like contract note transfer from broker-dealer to subcustodian and the mutual fund/FII
- Service Pre-match advice to the broker-dealer
- & Domestic Mutual Funds' trade data flow to/from the sub-custodian

Various international practices were also deliberated upon by the committee and committee found that there was no market in the world that had adopted STP at the market level. In view of the practices followed in the market, the committee suggested that in order to overcome the difficulties of the manual processing and smoothly transcend into shorter settlement cycles, it was vital to have Straight through Processing (STP) and Real Time Gross Settlement (RTGS) in place.

#### 4.1. STP COMMITTEE REPORT

The committee set up for implementation of STP in Indian markets deliberated on the issues concerning the STP as well as the ancillary issues related to the implementation of STP in the Indian market. The committee advocated for reduction in the manual intervention in the trade cycle, reduction of the paper work and standardisation of the messaging protocols. In its report, the committee have detailed out the following benefits provided by the STP:

- S Transparency / Audit ability
- Reduces Counterparty Risk
- Z Reduces Operational Risk
- ∠ More timely exception processing
- ✓ Performance Measurement
- ✓ Improve attractiveness of Indian market

While pointing out the various benefits of the STP, the committee had also detailed the various critical factors for the success of the STP. They are as under:

Solution Open standard protocols and message standards that are in compliance with best international standards, and

- Cooperation between the different market participants and users to ensure that common practices are established and followed.
- A robust financial infrastructure that links the main exchanges and clearing houses together, including direct computer linkage with the payment system.
- Cooperation with the regulatory and tax authorities in ensuring that electronic data/documents and electronic signatures are legally acceptable.

The committee in its report had detailed the factors relating to the implementation of STP in India. One of the major issues considered by the committee was the issue related to implementing an electronic contract note. In its report, the committee had also presented the details of the communication and the connectivity factors which would play a leading role in the implementation of the STP in India. Various message standard and protocols were considered by the committee. International practices in this regard were also debated upon.

#### **4.2. STP** COMMITTEE RECOMMENDATIONS

In order to implement STP in Indian market, the committee set up by SEBI recommended the following:

- Solution On-line Connectivity between the depositories to permit easier settlement.
- Recognition of electronic contract notes as a legal document as an alternative to paper based contract notes.
- Adoption of ISO 15022 standards for financial messaging with Digital Signature using PKI (Public Key Infrastructure).
- Encourage multiple STP Service Providers to set-up infrastructure to provide STP to bring in competition for higher efficiency and economy.
- Amendment to the legal framework (laws / regulations / bye-laws etc.) to provide for recognition of paperless form of data and records. The Committee identified and made a list of bye-laws / regulations etc. that needed to be changed in order to move to a paperless environment.

There were certain issues relating to the payment system that needed to be addressed on a priority basis. However, these did not fall under the purview of SEBI and the matter had to be referred to RBI for action at their end. The Committee recommended a strong need to implement **Real Time Gross Settlement** system. The RBI has already indicated that the RTGS system would be in place by June 2003 (which has later been revised to mid 2004). This would help in creating better synergy between settlement of funds and securities at the same time and true Delivery v/s Payment system can be achieved. Meanwhile, in the interim period, Electronic Funds Transfer (EFT) facility of the RBI was also proposed to be increased in terms of its coverage and the value so that payments may be made faster.

The STP committee also set out the viability and the road map for STP including the following key dependencies / comments:

- The carrier must be able to deliver a consistent communications platform that meets the security criteria recommended, and offers connectivity to all participants.
- While there is no constraint on the number of carriers, each carrier must, before launch, establish continuous connectivity with other carriers, so that a participant needs only to sign up to one carrier

The Basic Requirements for the communication platform was also set out by the committee.

#### 4.3. STP CIRCULAR

The recommendations of the committee on STP were accepted by SEBI. Based on the recommendations, SEBI vide letter dated October 03, 2002<sup>1</sup> (Ref: FITTC/FII/19320/2002) mandated introduction of STP for electronic trade processing

with a common messaging standard with effect from December 02, 2002. The STP was mandated on the following lines:

- Adoption of ISO 15022 messaging standards by the market participants.
- ∠ Electronic delivery of Contract Notes
- & Connectivity among the market participants and implementation of STP.

# CHAPTER 5. POST IMPLEMENTATION EXPERIENCE

STP was launched in India with the inauguration of STEADY-STP solution provided by NSDL on November 30, 2002. To start with, STP was impressed upon to be adopted by the domestic institutions, investors, fund managers, brokers and custodians. However, it was observed that though the market participants had joined the STP services, the system could not nourish due to various issues. The issues are highlighted as under:

#### 5.1.1. Lack of Inter-operability between all the STP Service Providers

Lack of inter-operability between the STP Service Providers has been one of the major roadblocks in making the STP framework popular. The reasons for the same reported by various market participants are as under:

#### 5.1.1.1. Lack of Message Handshake Protocols:

The existing framework provides a common messaging platform to provide for an electronic communication between the market participants through their respective STP Service Providers. However the STP Service Providers have their own systems which are independent of each other. The STP framework does not provide for Message Handshake Protocols – which could facilitate seamless communication between the independent systems of various STP Service Providers and ensure a free exchange of messages.

# **5.1.1.2.** Lack of Common Authentication of Digital Signatures across the STP Service Providers:

Different STP Service Providers have obtained their digital signatures from different Certifying Authorities. There is no common interface to verify the digital signature on a message from one STP Service Provider by another STP Service Provider (who has a digital signature from a different Certifying Authority).

#### 5.1.1.3. Lack of end to end compliance to ISO messaging formats from sender to the recipient and absence of standardisation of file formats for client's back office development:

The back offices of some of the institutional investors are not compliant to the ISO 15022 formats. This non-compliance leads to non-standardisation of the client platform which prevents seamless communication across clients. Further there are different STP Service Providers servicing various clients. As each STP Service Provider has a different STP platform, the integration of the back office systems with the system of the STP Service Provider is non-uniform and diverse across the various strata of clients leading to absence of STP communication between two clients of different STP Service Providers.

#### **5.1.1.4.** Other Technological Issues:

There are other technological issues like lack of a common file format, protocol detailing, import file formats, message exchange protocol, methods of encryption, and logical connectivity.

Due to the above issues, inter-operability between STP Service Providers has not been resolved. The SEBI mandate of implementing STP has led to the fund managers / custodians forcing their broker members to resolve the problem of inter-operability. As a solution, broker members have been following the informal practice of persuading mutual funds and custodians to sign up with the STP Service Provider they are connected or in case clients do not agree with that proposition, member brokers would have to sign up more than one or even all the STP Service Providers where the clients are signed up leading to inefficiency and time lag in executing STP. Also the back office of the brokers would have to run the different programs of each STP Service Provider leading to delay in post trade and pre-settlement processing.

# 5.1.2. Absence of a common agreement among the STP Service Providers

The legal framework of the STP system was executed through legal agreements between the STP Service Providers and the clients. However, the Legal Agreement between one STP Service Providers and its clients was different from another. Hence there was no common platform to formulate matters of mutual interest like legality, recourse, liabilities involved in exchanging and processing messages received from other STP Service Providers. Due to the absence of a standardized legal framework, the STP system could not witness the desired growth.

# 5.1.3. Lack of Service Legal Agreement between the STP Service Providers to guarantee delivery of the entire message in a secure and confidential manner

The STP Service Providers entered into a customized legal agreement with their clients. Due to non-standardisation of the legal agreement among the STP Service Providers, the STP Service Providers could not guarantee delivery of the entire message, especially if the message had to be delivered to a client registered with a different STP Service Provider in a secure and confidential manner. Due to the absence of this clause, most clients did not use the STP environment leading to low STP traffic.

# 5.1.4. High inter-connectivity charges to interconnect different STP Service Providers

There are high inter-connection charges for each inter-connection between STP Service Providers. Since there were multiple STP Service Providers, there would have been multiple inter-connections required to connect all the STP Service Providers. Further an entry of a new STP Service Provider would have resulted into an inter-connection with all the existing STP Service Providers which would result in prohibitive inter-connection charges.

# 5.1.5. Commercial considerations – bearing of the additional cost of developing and maintaining such interfaces

Due to the above reasons, the STP traffic has been dismally low. On the other hand to implement the STP system, there is a need to incur expenditure on both hardware and software systems. Large capital expenditure without high volumes has led to STP Service Providers charging heavy fees for the STP services. Due to high fees, few clients have signed up for the STP service which in turn has led to low volumes.

After the implementation of the STP framework in December 2002, the above issues were raised by various sections of the market as the stumbling block for the widespread use of STP. SEBI held various meetings with the STP Service Providers and they reiterated the problems of lack of clarity on the exclusive issue of an electronic contract note, technological issues, inter-operability issues, high CUG connectivity charges, lack of clarity on the legal issues and the commercial viability of the STP framework for the STP Service Providers.

#### **5.2.** MEETINGS WITH REGULATORY BODIES

To resolve the issue of inter-operability between the STP Service Providers (which was considered the major bottleneck), SEBI along with the STP Service Providers made a presentation to regulatory bodies on May 21, 2003 highlighting the importance of STP in India, the need of a vibrant STP system to graduate to a T+1 rolling settlement and efficient connectivity between all market participants including institutions like exchanges, clearing corporation, depositories etc. SEBI also highlighted the following recommendations of the STP committee:

- Electronic exchange of contract notes

SEBI also outlined the issues of inter-operability between the STP Service Providers and the prohibitive costs of CUG interconnectivity involved in resolving the issues of interconnectivity. Accordingly, SEBI suggested for the waiver of the interconnectivity charges between the STP Service Providers' networks to enable seamless communication between users of different STP Service Providers.

It was suggested that instead SEBI could form a CUG network for securities' market which would cover the various intermediaries associated with the securities' market. This being a single network would not attract inter-connectivity charges for the various securities' market intermediaries. However SEBI had indicated that as per the present charter, it would not be possible for SEBI to set-up such a network. As an alternative, it was suggested that SEBI make an application for waiver of interconnectivity charges for "STP Service Providers" specifically and SEBI should issue license / registration for STP Service Providers. This would facilitate (in consultation with the Basic Service Provider) in setting up procedures for the waiver of interconnectivity charges for STP Service Providers after the waiver of interconnectivity charges for STP Service Providers. This would facilitate for waiver of interconnectivity charges for STP Service Providers for the waiver of interconnectivity charges for STP Service Providers for the waiver of interconnectivity charges for STP Service Providers at formal request for waiver of interconnectivity charges for STP Service Providers

#### 5.3. MEETINGS WITH THE STP SERVICE PROVIDERS

To address the issue of inter-operability, a committee consisting of the 4 existing STP Service Providers was formed with NSDL as the convener. The Committee had various deliberations and raised issues of regulatory non-clarity of the issue of electronic contract notes, issues relating to payment of consolidated stamp duty, technological issues, absence of inter-operability between the STP Service Providers due to non-verification of the digital signature of one STP Service Provider (obtained from one Certifying Authority) by another STP Service Provider (who has obtained digital signature from another Certifying Authority), legal and operational issues subsequent to finalization of the operational issues.

NSDL on behalf of the Committee on July 4, 2003, forwarded a consolidated document highlighting the communication protocol & message structure standards / discussions which in their opinion would suit the inter-connectivity between the STP Service

Providers through a centralized hub. However one of the STP Service Provider, Financial Technologies had their reservations in adapting the specified customized protocol to suit the inter-operability needs. They preferred adopting the readymade standard messaging platforms.

# CHAPTER 6. CASE FOR FORMING A CENTRALIZED HUB

After deliberations with the exchanges, clearing corporations, STP Service Providers and other market participants and after taking into account the issues raised for the slow off-take of the existing STP framework, it was decided that in order to facilitate inter-operability between the various service providers, a STP centralised hub needed to be set up. Accordingly, a block diagram of the proposed STP network was forwarded to the regulatory bodies and they were requested to waive the inter-connection charges between the centralized hub and the STP service providers.

# 6.1. EXISTING REGULATORY SCENARIO ON INTERCONNECTIVITY

There were two options available for the STP centralised hub, one to set it up as a CUG or as an Internet Service Provider (ISP). It was informed that in the current scenario, registering the STP centralised hub as a CUG would necessitate a special permission to waive the inter-connection charges between the STP Service Providers and the STP centralised hub. According to them, the waiver of interconnection charges would take more time. Further, under the existing scenario, CUG networks do not have the flexibility to interconnect to other networks. Compared to this, ISP license has the required flexibility & the following advantages:

# 6.2. ADVANTAGES OF SETTING UP STP CENTRALISED HUB AS AN ISP

- The STP centralised hub set up as an ISP can be connected by an existing CUG network as a client.
- 2) The centralized hub could also be connected through a leased line connection or through dial-up connections. However it had been opined that a leased line

connection would be a more secure form of connection and the dial-up connectivity should be used as a back-up form of communication.

- 3) Interconnection to other ISP or any other network including CUG network does not attract any interconnect charges based on the directive issued by TRAI. Only leased line charges based on bandwidth and distance shall be applicable. As such, connectivity of STP centralised hub with any other CUG networks can be achieved without any licensing issues. It has also been confirmed that the STP centralised hub as an ISP would have the flexibility of connecting with any other CUG network like RBI's INFINET CUG network (to facilitate STP for funds).
- <u>4)</u> International connectivity is permitted.
- 5) IP/VPN connection is permitted.
- 6) Present ISP's license charges applicable are Rs. 1 per annum.
- 7) No major roll-out obligations. Even one customer with an ISP is regarded as the same having gone live considering the requirement of roll-out within 18 months as per the license requirements.
- 8) The STP centralised hub as an ISP could also be used for other allied services like a standard communication platform for various exchanges, depositories, and market participants and the STP centralised hub could be made scaleable to include STP among retail clients also.

Accordingly, stock exchanges, depositories and STP Service Providers decided to setup a STP centralised hub as an ISP to facilitate inter-connection and inter-operability between the STP Service Providers.

#### 6.3. CONSTITUTION OF STP CENTRALISED HUB:

In view of the above, it was decided to register the STP centralised hub as an Internet Service Provider (ISP) with TRAI. The next issue was the mechanism in which the STP centralised hub would be constituted and owned. After various deliberations, it was agreed that since the exchanges are the originators of trade and the trade gets finally settled with the Clearing Corporation / house associated with the exchange, the exchange and its Clearing Corporation is the focal point for all post trade, pre-settlement and post settlement activities. Hence it would be desirable for the exchanges to constitute the STP centralised hub to bring in the inherent synergies and efficiencies to make the whole framework economically viable.

NSE and BSE had shown interest in setting up the STP centralised hub. However setting up two centralized hubs would not solve the issue of inter-operability and would complicate the issue further. BSE endorsed the proposal but desired that the centralized hub be set up as a joint venture between BSE and NSE. NSE also agreed with the proposition of setting up the centralized hub as a joint venture. However NSE recommended implementing the proposed plan in two phases. In Phase I NSE would setup the centralized hub by earmarking some of its existing infrastructure to implement STP for institutional trades where the number of trades is not very large. In Phase II BSE and NSE could jointly develop a project to set up an independent STP centralised hub with an independent system architecture and infrastructure. This plan was accepted by both the exchanges.

It was also confirmed that an ISP license taken up by NSE in Phase I could be later reconstituted to enable joint ownership by BSE and NSE in Phase II. Accordingly, NSE made an application for the ISP (for the STP centralised hub) with Department of Telecommunication (DoT) and has procured the necessary registration of the STP centralised hub as an ISP.

# CHAPTER 7. DESIGNING THE REVISED STP FRAMEWORK

#### 7.1. ELECTRONIC CONTRACT NOTE

In order to operationalise the issue of an electronic contract note, SEBI had issued a circular no. SMDRP/POLICY/Cir-15/00 dated December 15, 2000<sup>2</sup> and a clarification vide letter dated SEBI/SMD/SE/15/2003/29/04 dated April 29, 2003<sup>3</sup> whereby SEBI had permitted the issue of electronic contract notes with digital signature obtained from a valid Certifying Authority provided under the Information Technology Act, 2000 (IT Act). The exchanges were directed to make the necessary amendments to the bye-laws, rules and regulations for the implementation of the same.

However it had been brought to the notice of SEBI that the format of the electronic contract note prescribed by the exchanges were not in conformity with the format of the physical contract note particularly with respect to the pre-printed terms and conditions. Hence members issuing electronic contract notes were also issuing physical contract notes which amounted to duplication and unnecessary reconciliation between the physical and electronic contract notes.

In order to streamline the issuance of electronic contract notes as a legal document like the physical contract note, SEBI prescribed a format for the electronic contract note and advised the exchanges to implement the following vide SEBI circular no. DNPD/Cir-9/04 dated February 3, 2004<sup>4</sup>:

 The exchanges would prescribe a standard format for the electronic contract note (based on the prescribed model format prescribed in Annexure A) in its bye-laws, rules and regulations.

<sup>&</sup>lt;sup>2</sup> Appendix 2

<sup>&</sup>lt;sup>3</sup> Appendix 3

<sup>&</sup>lt;sup>4</sup> Appendix 4

- 2) The exchange bye-laws, rules and regulations for issuance of electronic contract note were amended to include all the standard pre-printed terms and conditions in the physical contract note. The electronic contract note would mention the relevant bye-laws / rules / regulations of the exchange subject to which the said contract note is being issued.
- 3) The exchanges were also advised to modify / amend other relevant bye-laws, rules and regulations with respect to signing of the electronic contract note with a digital signature so as to make the modified format of the electronic contract note a valid legal document like the physical contract note.
- 4) The exchanges were asked to prescribe the mechanism of record keeping of electronic contract notes in a soft non-tamperable form in compliance with the provisions of the IT Act, 2000.

A similar format of an electronic contract note was prescribed for the debt segment by SEBI vide circular no. SEBI/MRD/SE/Cir-11/2004 dated February 25, 2004<sup>5</sup>.

#### 7.2. MANDATORY USE OF STP SYSTEM

In view of the aforesaid developments SEBI decided vide circular no. DNPD/Cir- 22 /04 dated April 1, 2004 that all the institutional trades executed on the stock exchanges would be mandatorily processed through the STP System w. e. f. July 01,  $2004^{6}$ .

#### 7.3. SYSTEM FLOW OF THE STP FRAMEWORK

In order bring in standardisation and objectivity, SEBI vide circular no. DNPD/Cir- 23/04 dated April 27, 2004<sup>7</sup> prescribed the following system flow of transactions in the STP framework:

<sup>&</sup>lt;sup>5</sup> Appendix 5

<sup>&</sup>lt;sup>6</sup> Appendix 6

<sup>&</sup>lt;sup>7</sup> Appendix 7

- a) A STP user intending to send an instruction would send the message to his STP service provider after digitally signing the same.
- b) The STP service provider would verify the signature of the STP user and forward it to the
  - recipient STP user, if the recipient STP user is availing services of the same STP service provider; or the
  - ii) STP centralised hub if the recipient STP user is not with the same STP service provider. In such a case the STP service provider would be required to prepare a message as per the STP centralised hub prescribed message format, enclose the user's message, digitally sign the message and then send it to the STP centralised hub
- c) On receipt of the message by the STP centralised hub, the STP centralised hub would
  - i) verify the signature of the sending STP service provider only.
  - ii) send an acknowledgment to the sending STP service provider.
- d) The STP centralised hub would forward the message to the recipient STP service provider after digitally signing on the message.
- e) The recipient STP service provider on receipt of the message from the STP centralised hub, shall verify the signature of the STP centralised hub, verify if the recipient STP user is associated with itself and send an appropriate acknowledgment with digital signature to the STP centralised hub. The STP centralised hub would in turn forward the acknowledgment (received from the recipient STP service provider) duly signed to the sending STP service provider.
- f) The recipient STP service provider shall forward the message to the recipient STP user. The recipient STP user would receive the message and verify the signature of the recipient STP service provider and sending STP user.

2) To enable inter-operation, the STP centralised hub would provide a utility / client software to the STP service provider. The STP service provider's point of interface with the STP centralised hub would be through this utility / client software. The PKI (Public key infrastructure) system for the interface shall be implemented at a later stage.

#### 7.4. LEGAL FRAMEWORK

As stated earlier, the STP centralised hub had been setup to provide a common platform for a secure STP environment which would enable seamless inter-connectivity between various STP users connected through their STP Service Providers. SEBI in order to implement a suitable regulatory mechanism to create a platform for common minimum service standards and imbibe a system of accountability issued the SEBI (STP centralised hub and STP service providers) Guidelines, 2004 (herein referred to as "STP Guidelines") vide SEBI circular no. DNPD/Cir-24/04 dated May 26, 2004<sup>8</sup>. In order to bring in standardisation, the STP Guidelines also prescribed a model agreement between the STP centralised hub and the STP service providers.

The STP Guidelines prescribes the eligibility criteria and conditions of approval for the STP centralised hub and the STP service providers, obligations and responsibilities of the STP centralised hub and the STP service providers and code of conduct for the STP service providers.

# 7.5. TRANSACTION WORK FLOW OF THE STP SYSTEM

As stated earlier, SEBI had prescribed the system flow of the STP system. To disseminate better understanding of the STP system to the STP users, SEBI also decided to define and prescribe the transaction work flow of the STP system vide SEBI circular no. DNPD/Cir-25/04 dated June 10, 2004<sup>9</sup>. SEBI had extensively consulted the STP centralised hub, STP service providers and the STP users before prescribing the transaction work flow for the STP system. The transaction work flow for the STP system is as follows:

<sup>&</sup>lt;sup>8</sup> Appendix 8

- 1. A contract note in electronic form in the prescribed format (IFN 515 messaging format) shall be issued by the broker & sent to the custodian and / or the institutional investor.
- 2. In case the contract note is processed directly by the institutional investor, the institutional investor shall send the trade confirmation of acceptance or rejection of the contract note to the broker by using the IFN 598 messaging format. The custodian shall also send the confirmation of acceptance or rejection of such contract note to the broker using the messaging standard IFN 548.
- In case the contract note is processed by the custodian on behalf of the institutional investor, the custodian shall send the confirmation of acceptance or rejection of the contract note to the broker by using the IFN 548 messaging format.
- The institutional investor shall send settlement instructions to its custodian in IFN 540 to IFN 543 messaging formats to the custodian for the following trade types:
  - a. IFN 540: settlement instruction for a clearing house buy trade
  - b. IFN 541: settlement instruction for a delivery-v/s-payment (DVP) buy trade
  - c. IFN 542: settlement instruction for a clearing house sell trade
  - d. IFN 543: settlement instruction for a delivery-v/s-payment (DVP) sell trade
- 5. The custodian shall confirm / reject the execution of the settlement instructions to the institutional investor in IFN 544 to IFN 547 messaging formats in the following manner:
  - a. IFN 544: confirmation / rejection of an instruction received in messaging format IFN 540

- b. IFN 545: confirmation / rejection of an instruction received in messaging format IFN 541
- c. IFN 546: confirmation / rejection of an instruction received in messaging format IFN 542
- d. IFN 547: confirmation / rejection of an instruction received in messaging format IFN 543
- 6. It was clarified that if a message (for the activities mentioned above) is sent using the STP centralised hub framework from one user to another user, then the confirmation / rejection for such a message shall also be sent using the STP centralised hub framework.

In order to bring in clarity and better understanding SEBI in consultation with the STP centralised hub, STP service providers and the STP users had also prescribed the messaging standards for IFN 515, IFN 540 to 547, IFN 548 and IFN 598.

In order to bring in standardisation in the input of the identification codes in the prescribed messaging standards SEBI in the circular had also prescribed the following codes to be used by the various entities:

- 1. <u>Brokers</u>: SEBI registration number (until MAPIN ID is available for every broker)
- Mutual Funds and schemes of Mutual Funds: SEBI registration number for Mutual Funds and Unique client code issued by the exchanges for schemes (until MAPIN ID is available for each scheme of a mutual fund)
- FIIs and sub-accounts: SEBI registration number for FII and Unique client code issued by the exchanges for sub-account (until MAPIN ID is available for each FII and their sub-accounts)
- 4. <u>Custodians:</u> SEBI registration number (until MAPIN ID is available for every custodian)
- 5. STP service providers and STP centralised hub: MAPIN ID
- Depositories and exchanges / clearing house / clearing corporation: MAPIN ID.

7. <u>Other Institutional Investors like financial institutions, banks etc.</u> Unique client code issued by the exchanges (until MAPIN ID is available for each Institutional Investor)

# CHAPTER 8. IS THE PROPOSED STP FRAMEWORK INDEED A SOLUTION?

The proposed STP framework is perceived to address all the causes of concern highlighted above (in Chapter 5). To illustrate the following table enumerates the issues raised and proposed solution for each issue under the proposed STP framework:

Sr.	Issue	Proposed Solution
No.		
1.	Lack of inter-	The proposed STP framework of setting up a STP
	operability	centralised hub where all the STP Service Providers would
	between the STP	get connected would provide the requisite platform to
	Service Providers.	implement seamless inter-operability between the STP
		Service Providers.
2.	Lack of Message	The proposed system of setting up an STP centralised hub
	Handshake	where the STP centralised hub would be a router for all inter
	Protocol	STP Service Providers' related transactions would provide a
		link for the varying system of the existing STP Service
		Providers and any future STP Service Provider which may
		join the STP framework as the STP centralised hub would
		prescribe the minimum eligibility conditions for all STP
		Service Providers and the operating guidelines for their day
		to day operations to bring in required level of
		standardisation to enable seamless communication between
		two STP Service Providers.
3.	Lack of Common	The proposed STP framework would provide the flexibility
	Authentication of	to the STP Service Providers to have their digital signatures
	Digital Signature	from different Certifying Authority registered under the

	across the STP	Information Technology Act, 2000. The STP Service
	Service Providers.	Providers as part of their eligibility criteria would be
		required to share the application used by them in digitally
		signing the messages with the centralized hub to enable the
		centralized hub to recognize the signature of a particular
		STP Service Provider. The STP centralised hub would also
		have a system logic of using the necessary software (for
		digital signature) to enable the message to flow seamlessly
		from one STP Service Provider using one software for
		digital signature to another STP Service Provider having a
		different software for digital signature.
4.	Lack of end to	Under the proposed STP framework, the STP centralised
	end compliance to	hub would provide standardized client software which the
	ISO messaging	STP Service Providers could install at the back office of
	formats from	their clients.
	sender to the	
	recipient and	
	absence of	
	standardisation of	
	file formats for	
	client's back	
	office	
	development	
5.	Other	The STP centralised hub has prescribed the technical
	technological	specifications to resolve the issues of lack of common file
	issues like lack of	format, common protocol detailing, import file formats,
	a common file	message exchange protocol and other technological issues.
	format, protocol	Further, technological advancements are dynamic and
	detailing, import	undergo continuous change. However the proposed STP
	file formats,	framework of a STP centralised hub which would connect to
	message	all the STP Service Providers for all STP related
	exchange	transactions and a common client software applications

	protocol, methods	builds in the required flexibility for necessary up gradations
	1	
	of encryption, and	and technological advancements for higher efficiency and
	logical	robustness of the system.
	connectivity.	
6.	Formation of a	The formation of a STP centralised hub and a standardized
	monopolistic	platform to enable seamless inter-operability would enable
	situation due to	multiple STP Service Providers to co-exist on a level
	lack of inter-	playing field leading to healthy competition for higher
	operability with	efficiency and economy of service.
	all the clients	
	forced to sign up	
	with one STP	
	Service Provider.	
7.	Absence of a	Under the revised system of STP, SEBI has prescribed a
7.	common	model agreement between the STP centralised hub and the
		STP Service Providers which would standardize all the
	agreement among	
	the STP Service	relevant conditions like operations, legal framework etc.
	Providers	Further there is also a prescribed regulatory framework in
		the form of STP Guidelines.
8.	Lack of Service	The model STP framework would have a complete audit
	Legal Agreement	trail with time stamping of the flow of messages (for inter
	between the STP	STP Service Providers' transactions) right from the sending
	Service Providers	client's system upto the recipient client's system. A system
	to guarantee	of acknowledgement on successful delivery of the message
	delivery of the	would also be formulated to ensure a secure means of
	entire message in	communication. As regards, confidentiality of the message,
	a secure and	the proposed STP framework would ensure that the original
	confidential	message would not be opened by the STP centralised hub.
	manner	The time stamping by the STP centralised hub and the STP
		Service Providers would be done on a wrapper which could
		be executed without opening the message ensuring
		confidentiality of the message.
		connuclitativy of the message.

9.	High inter-	Under the proposed STP framework, the STP centralised
	connectivity	hub would be established as an ISP. As per the existing
	charges to	rules, there are no inter-connecting charges for any number
	interconnect	of connections including connections to existing CUG
	different STP	networks.
	Service Providers	
10.	Commercial	The proposed STP framework should resolve all the issues
	considerations –	of inter-operability between the STP Service Providers and
	bearing of the	the legality of electronic delivery of contract notes. This
	additional cost of	could increase the STP traffic considerably thus making the
	developing and	whole project commercially viable. On the stabilization of
	maintaining such	the STP framework, the same hub could also be extended
	interfaces	for retail trades which could exponentially increase the STP
		traffic. Further alternative uses of the STP centralised hub
		like standard communication platform for various
		exchanges, depositories, and market participants could also
		be conceived.

From the above, it can be seen that the proposed STP framework would address all the perceived bottlenecks which had prevented the STP traffic to expand. However it is important that the proposed STP framework is implemented in the manner perceived and complete in all respects to achieve the inherent benefits of the system.

# CHAPTER 9. POST IMPLEMENTATION

The STP system was mandatory for all institutional trades executed on the exchanges w.e.f. July 01, 2004. In the first week of July 2004, there were a lot of rejections witnessed in the STP system. Meetings were held with the STP centralised hub and STP Service Providers to identify the main causes of rejections and find their possible solutions. It was observed that the rejections were mainly due to the operational issues relating to the identification of the entities involved in the STP system. The issues were considered and addressed to. There has been a considerable fall in the rejections within the first fortnight of July 2004.

There has been a lot of appreciation from various sections of the market with respect to the proactive steps taken by SEBI in implementing STP. Initiatives are being pursued to extend the use of the STP in the entire settlement process to complete the logical extension in the gamut of the securities market.

# CHAPTER 10. LIST OF APPENDICES

- 1) SEBI letter no. FITTC/FII/19320/2002 dated October 03, 2002.
- 2) SEBI circular no. SMDRP/POLICY/Cir-15/00 dated December 15, 2000
- 3) SEBI clarification vide letter dated SEBI/SMD/SE/15/2003/29/04 dated April 29, 2003.
- 4) SEBI circular no. DNPD/Cir-9/04 dated February 3, 2004
- 5) SEBI circular no. SEBI/MRD/SE/Cir-11/2004 dated February 25, 2004
- 6) SEBI circular no. DNPD/Cir- 22 /04 dated April 1, 2004.
- 7) SEBI vide circular no. DNPD/Cir- 23/04 dated April 27, 2004.
- 8) SEBI circular no. DNPD/Cir-24/04 dated May 26, 2004.
- 9) SEBI circular no. DNPD/Cir-25/04 dated June 10, 2004.

#### **10.1. APPENDIX 1**

#### EXECUTIVE DIRECTOR FITTC DEPARTMENT

FITTC/FII/19320/2002 October 03, 2002

ТО

All Custodians, Stock Exchanges/Depositories

Sub : Introduction of Straight Through Processing.

Dear Sir,

The Indian securities market has undergone through a rapid expansion during the last decade such as dematerialization, rolling settlement, shorter settlement cycles etc.

Presently trades are settled in the stock exchanges on T+3 basis. Further, it is also decided to gradually move from T+3 settlement period to T+2 and T+1 settlement period by March 2004.

The process of trade settlement starting from origination of trade till execution and settlement of the same involves manual entry and re-entry of the same trade particulars by the different market participants. This manual process is time taking and subject to errors because of manual intervention repeatedly. For smooth functioning of T+3 settlement period or shorter period and to avoid manual intervention a single automated process from origination of trade though to settlement is the need of the hour. Therefore, the concept Straight Through Processing (STP) which is basically capturing and processing through settlements of a trade particulars electronically without manual intervention, is required to be adopted.

In order to examine the feasibility of STP in the Indian markets, SEBI constituted a committee comprising of representatives from various market intermediaries and from the Reserve Bank of India.

The Committee in its report has observed and recommended the following :

Markets throughout the world are continually looking for new investment opportunities. Foreign Investment into India will be determined, not only, on investment opportunity but also on the operational efficiency and risk profiles of the Indian market. Introducing a process which increases operational efficiency will only enhance India's profile and therefore its attractiveness to foreign investment.

Further, reducing the settlement cycle, the time between execution to settlement, will eliminate many of the risks associated with trade processing. Achieving seamlessness

will be an enabler for these shorter settlement cycles to assist both domestic and crossborder trades in Indian securities.

- 1. Adoption of ISO 15022 messaging standards by the market participants.
- 2. Electronisation of contract Notes.
- 3. Connectivity among the market participants and implementation of STP.

It has been decided to accept the committee's recommendations and introduce STP for electronic trade processing with a common messaging standard i.e. ISO 15022 with effect from December 02, 2002.

You are advised to bring this to the notice of all your constituents and take necessary steps to implement STP by the aforesaid date.

Please acknowledge receipt.

Yours faithfully

R.M. JOSHI EXECUTIVE DIRECTOR

# **10.2.** APPENDIX 2

#### SECURITIES AND EXCHANGE BOARD OF INDIA SECONDARY MARKET DEPARTMENT Mittal Court, A Wing, Gr. Floor, 224, Nariman Point, Mumbai 400 021

SMDRP/POLICY/CIR-56/00 December 15, 2000

To:

The President/Executive Director/ Managing Director of all the Stock Exchanges

Dear Sir/Madam,

#### Use of Digital Signature on Contract Notes

Following passing of the Information Technology Act, 2000 (IT Act), contract notes with digital signatures are legally valid. This issue was discussed in the meeting of the Secondary Market Advisory Committee (SMAC) of SEBI held on November 28, 2000.

Pursuant to the discussions in the SMAC and provisions of the IT Act, it is clarified that the brokers are allowed to issue contract notes authenticated by means of digital signatures provided that the broker has obtained digital signature certificate from Certifying Authority under the IT Act, 2000. Mode of confirmation by the client may be as specified in the agreement between the broker and the client.

Yours faithfully,

P. K. BINDLISH DIVISION CHIEF SECONDARY MARKET, DEPOSITORY, RESEARCH & PUBLICATIONS DEPARTMENT E-Mail : pkb@sebi.gov.in

# **10.3.** APPENDIX **3**

General Manager Secondary Market Department e-mail : <u>pkb@sebi.gov.in</u> SEBI/SMD/SE/15/2003/29/04

April 29, 2003

To Managing Directors and Executive Directors Of all the stock exchanges

Dear Sir,

Sub :- Issuance of Contract Notes in electronic form

This circular is being issued in exercise of powers conferred by section 11 (1) of the Securities and Exchange Board of India Act, 1992, read with section 10 of the Securities Contracts(Regulation) Act 1956, to protect the interests of investors in securities and to promote the development of, and to regulate the securities market.

Please refer to our circular no. SMDRP/POLICY/CIR-56/00 dated December 15, 2000 on the captioned subject wherein it was stated that brokers can issue contract notes authenticated by means of digital signatures provided that the broker has obtained digital signature certificate from Certifying Authority under the IT Act, 2000.

SEBI has been receiving representations from market participants whether, they can issue contract notes in electronic form. In this regard, it is clarified that by virtue of our above mentioned circular, the contract notes can be issued by the brokers in electronic form authenticated by means of digital signatures.

The Exchanges are directed to make necessary amendments to the bye-laws, rules and regulations to give effect to the above clarification immediately.

The Exchanges are directed to bring this clarification to the notice of the member brokers/clearing members of the Exchange and also to disseminate the same on the website for easy access to the investors.

The Exchanges are also directed to communicate to SEBI, the status of the implementation of this circular in Section II, item no. 13 of the Monthly Development Report for the month of April 2003.

Yours faithfully

## P K Bindlish

# **10.4.** APPENDIX **4**

#### CHIEF GENERAL MANAGER DERIVATIVES AND NEW PRODUCTS DEPARTMENT

DNPD/ Cir-9/04 February 3, 2004

The Executive Director / Managing Director / Administrators Of all Stock Exchanges.

Dear Sir,

#### Sub: Issuance of Electronic Contract Notes

This is in continuation of the SEBI circular no. SMDRP/POLICY/Cir-15/00 dated December 15, 2000 and clarification issued vide letter dated SEBI/SMD/SE/15/2003/29/04 dated April 29, 2003 on the issue of an electronic contract note whereby SEBI had permitted the issue of electronic contract notes with digital signature obtained from a valid Certifying Authority provided under the Information Technology Act, 2000 (IT Act). The exchanges were directed to make the necessary amendments to the bye-laws, rules and regulations for the implementation of the same.

It has been brought to the notice of SEBI that the format of the electronic contract note prescribed by the exchanges were not in conformity with the format of the physical contract note particularly with respect to the pre-printed terms and conditions. Hence members issuing electronic contract notes were also issuing physical contract notes which amounted to duplication and unnecessary reconciliation between the physical and electronic contract notes.

In order to streamline the issuance of electronic contract notes as a legal document like the physical contract note, the exchanges are advised to implement the following:

- 1) The exchanges would prescribe a standard format for the electronic contract note (based on the model format prescribed) (refer URL: <u>http://www.sebi.gov.in</u>) in its bye-laws, rules and regulations.
- 2) The exchange bye-laws, rules and regulations for issuance of electronic contract note shall be amended to include all the standard pre-printed terms and conditions in the physical contract note. The electronic contract note would mention the relevant bye-laws / rules / regulations of the exchange subject to which the said contract note is being issued.
- 3) The exchange shall also modify / amend other relevant bye-laws, rules and regulations with respect to signing of the electronic contract note with a digital

signature so as to make the modified format of the electronic contract note a valid legal document like the physical contract note.

4) The mechanism of record keeping of electronic contract notes in a soft nontamperable form shall be prescribed by the exchange in compliance with the provisions of the IT Act, 2000.

Hence you are advised to, -

- ? Make necessary amendments to the relevant bye-laws, rules and regulations of the exchange for the implementation of the above decision immediately.
- ? Bring the provisions of this circular to the notice of members of the Exchange and also disseminate the same on your website, if any.
- ? Communicate to SEBI, the status of the implementation of the provisions of this circular in Section II, item no 13 of the Monthly Development Report for the month of February 2004.

This circular is being issued in exercise of powers conferred under section 11 (1) of the Securities and Exchange Board of India Act 1992, read with section 10 of the Securities Contracts (Regulation) Act, 1956 to protect the interests of investors in securities and to promote the development of, and to regulate the securities market.

Yours sincerely,

N. PARAKH

# **10.5.** APPENDIX **5**

DEPUTY GENERAL MANAGER Market Regulation Department E-mail: <u>sundaresanvs@sebi.gov.in</u>

> SEBI/MRD/SE/Cir-11/2004 February 25, 2004

The Executive Directors / Managing Director/Administrators of All Stock Exchanges Dear Sir / Madam,

#### Sub: <u>Issuance of Electronic Contract Notes – Debt Market</u>

- 1. This is in continuation of SEBI Circular No.DNPD/Cir-9/04 dated February 3, 2004 specifying the model format on the captioned subject for the equity market.
- 2. The model <u>format</u> for the issuance of electronic contract note for the debt market is enclosed. Based on this, the exchanges are advised to prescribe a standard format for issuance of the electronic contract note in its bye-laws, rules and regulations. (refer URL: <u>http://www.sebi.gov.in</u>)
- 3. The other requirements as mentioned in points 2, 3 and 4 of aforesaid circular dated 03/02/04 are applicable for debt market as well and accordingly, required to be complied with.
- 4. The Stock Exchanges are directed to;
  - 1. make necessary amendments to the relevant bye-laws, rules and regulations for the implementation of the above decision immediately.
  - 2. bring the provisions of this circular to the notice of the member brokers/clearing members of the Exchange and also to disseminate the same on the website.
  - 3. communicate to SEBI, the status of the implementation of the provisions of this circular in Section II, item no. 13 of the Monthly Development Report for the month of March 2004.
- 5. This circular is being issued in exercise of powers conferred under Section 11 (1) of the Securities and Exchange Board of India Act, 1992, to protect the interests of investors in securities and to promote the development of, and to regulate the securities market.

Yours faithfully,

#### V S SUNDARESAN

# **10.6.** APPENDIX 6

#### PRATIP KAR EXECUTIVE DIRECTOR

DNPD/Cir- 22 /04 April 01, 2004

То

All Stock Exchanges, Depositories and Custodians.

Dear Sir,

#### <u>Mandatory use of STP system for all institutional trades executed on the stock</u> <u>exchanges.</u>

Straight Through Processing (STP) is generally understood to be a mechanism that automates the end to end processing of transactions of financial instruments. It involves use of a system to process or control all elements of the work flow of a financial transaction, what are commonly known as the Front, Middle, Back office and General Ledger. In other words, STP allows electronic capturing and processing of transactions in one pass from the point of order origination to final settlement. STP thus streamlines the process of trade execution and settlement and avoids manual entry and re-entry of the details of the same trade by different market intermediaries and participants. Usage of STP enables orders to be processed, confirmed, settled in a shorter time period and in a more cost effective manner with fewer errors. Apart from compressing the clearing and settlement time, STP also provides a flexible, cost effective infrastructure, which enables e-business expansion through online processing and access to enterprise data.

SEBI vide letter dated October 3, 2002 informed the stock exchanges, depositories and custodians that it proposed to introduce STP for electronic trade processing with a common messaging standard ISO 15022 w.e.f December 2, 2002. Accordingly, STP was launched in India on November 30, 2002. Currently, STP is being used by the market participants on a voluntary basis. To facilitate STP, SEBI has also issued circulars SMDRP/POLICY/Cir-15/00 dated December 15. 2000 & circular SEBI/SMD/SE/15/2003/29/04 dated April 29, 2003 which permitted the issue of electronic contract notes with digital signature obtained from a valid Certifying Authority provided under the Information Technology Act, 2000 (IT Act) and circular no. DNPD/Cir-9/04 dated February 3, 2004 & circular no. SEBI/MRD/SE/Cir-11/2004 dated February 25, 2004 directing exchanges to amend their bye-laws, rules and regulations for the equity and the debt segment to streamline the issuance of electronic contract notes as a legal document like the physical contract note. Exchanges are in the process of amending their bye-laws, rules and regulations.

While several STP Service Providers have been providing STP service to the market participants, however, there was no inter-operability between the STP Service Providers.

To resolve the issue of inter-operability between the STP Service Providers, it has been decided in consultation with the stock exchanges and the STP Service Providers that a STP Centralised Hub would be setup. Currently this STP Centralised Hub has been setup and made operational by NSE. NSE has obtained the necessary approvals from Department of Telecommunications (DoT) as an Internet Service Provider (ISP). Subsequently this STP Centralised Hub would be further developed jointly with BSE.

In view of the aforesaid developments, it has been decided that all the institutional trades executed on the stock exchanges would be mandatorily processed through the STP System w.e.f **July 01, 2004**. This circular is being issued to provide adequate notice to the market and market participants about the mandatory use of STP Service for institutional trades. A circular containing the detailed process flow, role and responsibilities of the STP Service Providers and the STP Centralised Hub, standard agreement between the STP Service Providers and the STP Centralised Hub would be issued shortly..

This circular is being issued in exercise of powers conferred by section 11 (1) of the Securities and Exchange Board of India Act, 1992, read with section 10 of the Securities Contracts(regulation) Act 1956, to protect the interests of investors in securities and to promote the development of, and to regulate the securities market.

Yours faithfully,

PRATIP KAR

# **10.7.** APPENDIX **5**

## GENERAL MANAGER

**DNPD/Cir-23/04** April 27, 2004

All Exchanges, Clearing Corporation / Clearing House, Depositories, Custodians, AMFI, STP service providers and STP Centralized Hub

Dear Sir,

- Further to the circular no. DNPD/Cir-22/2004 dated April 1, 2004 mandating the use of the Straight Through Processing (STP) System for all institutional trades w. e. f. July 1, 2004. The present circular contains the detailed system flow which was referred to in the said circular.
- 2) The system flow of the STP framework would be as follows:
  - a) A STP user intending to send an instruction would send the message to his STP service provider after digitally signing the same.
  - b) The STP service provider would verify the signature of the STP user and forward it to the
    - i) recipient STP user, if the recipient STP user is availing services of the same STP service provider; or the
    - STP centralized hub if the recipient STP user is not with the same STP service provider. In such a case the STP service provider would be required to prepare a message as per the STP centralized hub prescribed message format, enclose the user's message, digitally sign the message and then send it to the STP centralized hub
  - c) On receipt of the message by the STP centralized hub, the STP centralized hub would
    - i) verify the signature of the sending STP service provider only.
    - ii) send an acknowledgment to the sending STP service provider.
  - d) The STP centralized hub would forward the message to the recipient STP service provider after digitally signing on the message.
  - e) The recipient STP service provider on receipt of the message from the STP centralized hub, shall verify the signature of the STP centralized hub, verify if the recipient STP user is associated with itself and send an appropriate acknowledgment with digital signature to the STP centralized hub. The STP

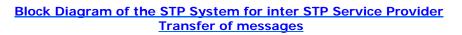
centralized hub would in turn forward the acknowledgment (received from the recipient STP service provider) duly signed to the sending STP service provider.

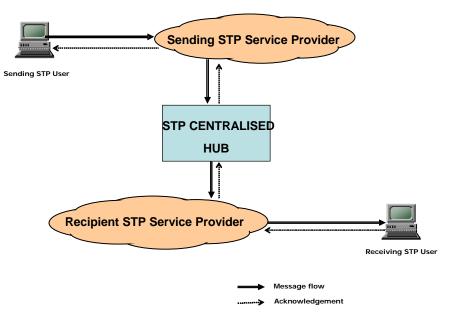
- f) The recipient STP service provider shall forward the message to the recipient STP user. The recipient STP user would receive the message and verify the signature of the recipient STP service provider and sending STP user.
- 3) To enable inter-operation, the STP centralized hub would provide a utility / client software to the STP service provider. The STP service provider's point of interface with the STP centralized hub would be through this utility / client software. The PKI (Public key infrastructure) system for the interface shall be implemented at a later stage.
- 4) The block diagram of the entire STP System is enclosed in Annexure I.
- 5) This circular is being issued in exercise of powers conferred by section 11 (1) of the Securities and Exchange Board of India Act, 1992, read with section 10 of the Securities Contracts(regulation) Act 1956, to protect the interests of investors in securities and to promote the development of, and to regulate the securities market.

Yours faithfully,

## D. RAVIKUMAR

### Annexure I





# **10.8.** APPENDIX 6

#### CHIEF GENERAL MANAGER DERIVATIVES AND NEW PRODUCTS DEPARTMENT

DNPD/Cir-24/04 May 26, 2004

All Exchanges, Clearing Corporation / Clearing House, Depositories, Custodians, AMFI, STP service providers and STP Centralized Hub

#### Sub: Straight Through Processing Service in the Indian Securities Market

Dear Sir,

- This is in continuation to our previous circular no. DNPD/Cir-9/04 dated February 3, 2004 & circular no. SEBI/MRD/SE/Cir-11/2004 dated February 25, 2004 streamlining the issuance of electronic contract notes as a legal document like the physical contract note for the equity and debt segments, circular no. DNPD/Cir-22/2004 dated April 1, 2004 mandating the use of the Straight Through Processing (STP) system for all institutional trades w. e. f. July 1, 2004 and circular no. DNPD/Cir-23/04 dated April 27, 2004 prescribing the detailed system flow of the STP system.
- 2) SEBI in order to regulate the STP service is hereby issuing the SEBI (STP centralised hub and STP service providers) Guidelines, 2004 (herein referred to as "STP Guidelines") which also prescribes the model agreement between the STP centralised hub and the STP service providers.
- 3) The STP guidelines prescribes the eligibility criteria and conditions of approval for the STP centralised hub and the STP service providers, obligations and responsibilities of the STP centralised hub and the STP service providers and code of conduct for the STP service providers. The STP centralised hub and the STP service providers shall abide by these Guidelines.
- 4) To prescribe contractual obligations between the STP centralised hub and the STP service providers and to facilitate standardisation of service, a model agreement between the STP centralised hub and the STP service providers has also been prescribed by SEBI and is prescribed as Schedule II of the STP Guidelines. The agreement between the STP centralised hub and the STP service provider shall include the provisions included in the model agreement.
- 5) This circular is being issued in exercise of powers conferred by section 11 (1) of the Securities and Exchange Board of India Act, 1992, read with section 10 of the Securities Contracts(regulation) Act 1956, to protect the interests of investors in securities and to promote the development of, and to regulate the securities market.

Yours sincerely,

# N. PARAKH

Encl.

1) SEBI (STP centralised hub and STP service providers) Guidelines, 2004

#### SECURITIES AND EXCHANGE BOARD OF INDIA (STP CENTRALISED HUB AND STP SERVICE PROVIDERS) GUIDELINES, 2004

### 1) **PRELIMINARY**

- (1) These Guidelines shall be called the Securities and Exchange Board of India (STP Centralised Hub and STP Service Providers) Guidelines, 2004.
- (2) These Guidelines are being issued under section 11 of the Securities and Exchange Board of India Act, 1992 to promote the development of the securities market.
- (3) They shall come into force on  $26^{th}$  day of May, 2004

### 2) **DEFINITIONS**

- (1) In these Guidelines, unless the context otherwise requires:-
  - (a) "Act" means the Securities and Exchange Board of India Act, 1992;
  - (b) "Certifying Authority" means a certifying authority who has been granted a license under section 24 of the Information Technology Act, 2000;
  - (c) "SEBI" means the Securities and Exchange Board of India established under Section 3 of the Act;
  - (*d*) "STP" means straight through processing;
  - (e) "STP centralised hub" means an infrastructure set-up by a person or entity for the purpose of rendering STP service by providing a platform for communication between different STP service providers;
  - (f) "STP message" means and includes all the messages for electronic trade processing with a common messaging standard as may be defined by SEBI from time to time;
  - (g) "STP service" means the setting up and maintaining of infrastructure to create an electronic communication network to facilitate information exchange with respect to securities market transactions between various market participants from the stage of trade initiation to final settlement through a STP system flow as may be determined by SEBI from time to time;
  - (*h*) "STP service provider" means a person or entity providing STP service to STP users to the extent of conveying messages between a STP user and the STP centralised hub and/or between two STP users;
  - (*i*) "*STP user*" means all the users of the STP service and includes such users as are stipulated by SEBI; and,

- (*j*) "*TRAI*" means the Telecom Regulatory Authority of India established under the Telecom Regulatory Authority of India Act, 1997.
- (2) Words and expressions used and not defined in these Guidelines, but defined in the Act or in the Securities Contracts (Regulation) Act, 1956 or in any rules or regulations made thereunder, shall have the meanings respectively assigned to them in such Acts, rules or regulations.

### 3) ELIGIBILITY CRITERIA FOR STP CENTRALISED HUB AND STP SERVICE PROVIDERS

- (1) No person shall act as an STP centralised hub or a STP Service provider unless it obtains approval from SEBI to provide such service.
- (2) For the grant of a certificate of approval SEBI shall take into account the following:
  - i. whether the applicant is a person or entity with a minimum networth as may be prescribed from time to time.
  - ii. whether the applicant has adequate infrastructure facilities setup in India like office space, equipment and manpower with adequate experience in dealing in securities market and adequate expertise in providing necessary services and software solutions.

## 4) OBLIGATIONS AND RESPONSIBILITIES OF STP CENTRALISED HUB

- (1) The STP centralised hub shall comply with the following:
  - i. The STP centralised hub shall at all times comply with the requirement of eligibility criteria, specified by SEBI.
  - ii. The STP centralised hub shall abide by all the provisions of the Act, Rules, Regulations, Guidelines, Resolutions, Notifications, Directions, Circular, etc. as may be issued by the Government of India / TRAI / Department of Telecommunications and SEBI from time to time as may be applicable to the STP centralised hub.
  - iii. The STP centralised hub shall obtain such approval/s from such authorities as may be necessary to function as a centralised hub.
  - iv. The STP centralised hub shall obtain a digital signature certificate from a Certifying Authority and shall ensure that such digital signature certificate is valid and in force at all times. A copy of the certificate shall be submitted to all the recognized STP service providers.
  - v. The STP centralised hub shall deliver a consistent and secure communication platform and shall establish continuous connectivity with all the recognized STP service providers to the best of its ability.

- vi. The STP centralised hub shall verify the digital signature certificate furnished by the STP Service Provider before connecting it to the STP centralized hub.
- vii. The STP centralised hub shall confirm authenticity, integrity and non-reputability of all messages submitted by the STP Service Provider.
- viii. The STP centralised hub shall ensure that the message received from the STP service provider is in the specified messaging standard.
- ix. The STP centralised hub shall promptly deliver the messages to the recipient STP service provider and shall ensure that only the intended STP Service Provider receives the message.
- x. The STP centralised hub shall digitally sign all messages sent to the STP service provider.
- xi. The STP centralised hub shall maintain a directory of all STP service providers and STP users.
- xii. The STP centralised hub shall maintain a complete record of the flow of messages processed. The records of the STP centralised hub shall be open for inspection by SEBI or any other person duly authorised by SEBI for this purpose.
- xiii. The STP centralised hub shall not modify / amend the communication protocol without consulting all the approved STP service providers.
- xiv. The STP centralised hub shall ensure that the message is not misused or tampered with while in its possession.
- xv. The STP centralised hub shall maintain confidentiality of information about its users and shall not divulge the same to other clients, the press or any other person except in accordance with law or as per the directions of any court of law or of SEBI.
- xvi. The STP centralised hub may charge reasonable fees from the STP service providers.

## 5) OBLIGATIONS AND RESPONSIBILITIES OF STP SERVICE PROVIDER

- (1) The STP Service provider shall comply with the following :
  - i. The STP service provider shall at all times comply with the requirement of eligibility criteria, specified by SEBI.
  - ii. The STP service provider shall establish connectivity with the STP centralised hub before providing STP service to its users.
  - iii. The STP service provider shall provide the necessary details of the STP users connected with it and all its details to the STP centralised hub for the purpose of creating and maintaining a directory of STP service providers and STP users.
  - iv. The STP service provider shall comply with the minimum specifications specified by the STP centralised hub and as may be mutually agreed upon.

- v. The STP service provider shall abide by the service standards as may be specified by SEBI and / or the STP centralised hub in consultation with the STP service providers.
- vi. The STP Service Provider shall obtain a digital signature certificate from a Certifying Authority and submit a copy of the Certificate to the STP centralised hub.
- vii. The STP Service Provider shall ensure that the digital signature certificate is valid and in force.
- viii. The STP service providers shall deliver a consistent and secure communication platform and shall establish continuous connectivity with the STP centralised hub to the best of its ability.
- ix. The STP service provider shall ensure that the message sent to the STP centralised hub is in the prescribed messaging standard.
- x. The STP service provider shall verify the digital signature certificate furnished by the STP centralised hub before connecting itself to the STP centralised hub.
- xi. The STP service provider shall confirm authenticity, integrity and non-repudiability of all messages submitted to the STP centralised hub. The STP service provider shall keep complete track of the flow of messages for record and audit.
- xii. The STP service providers may charge reasonable fees from the STP users.
- xiii. The STP service provider shall exchange messages between other STP service providers only through the STP centralised hub. Provided that in force majuere measures or any other circumstances due to which the connectivity of the STP centralised hub is not available, the STP service providers after mutual discussion may exchange messages directly among themselves for such period.
- xiv. The STP service providers shall digitally sign all messages sent from it to the STP centralised hub.
- xv. The STP service provider shall enter into an agreement with all its STP users which shall also specify the fees payable by the STP user for the services.
- xvi. The STP service provider shall maintain a directory of the STP users connected to it.
- xvii. The STP service provider shall maintain a complete record of the flow of messages handled. The records of the STP service provider shall be open for inspection by SEBI or any other person duly authorised by SEBI for this purpose.
- xviii. The STP Service Provider shall verify the Digital signature on the message of the STP user connected to the STP Service Provider
- xix. The STP service provider shall ensure that the message from the STP user is in the specified messaging format.
- xx. The STP service provider shall promptly deliver messages to and from the STP user.
- xxi. In respect of inter STP service provider messages, the STP service provider shall perform all actions to the best of its ability in the same manner, diligence, speed and with all checks and balances as

if the message is to be delivered / received by the same service provider.

(2) Nothing in these guidelines shall exempt the STP service provider from discharging any obligations placed on it by any law, regulations and guidelines.

#### 6) CONDITIONS OF APPROVAL FOR STP CENTRALISED HUB AND STP SERVICE PROVIDERS

- (1) Terms of approval:
  - i. The approval by SEBI shall be for an initial period of five years for STP centralised hub and for a period of three years for STP service providers and must be renewed periodically.
  - ii. The STP centralised hub and STP service provider must ensure continuous validity of approval by SEBI in order to function as a STP service provider.
  - iii. The Board shall have the right to suspend / cancel the approval of the STP centralised hub and/or STP service provider in case of violation of the terms of the guidelines.

### 7) CODE OF CONDUCT FOR STP SERVICE PROVIDERS

Every STP service provider shall abide by the Code of Conduct as specified in Schedule I.

#### 8) MODEL AGREEMENT

The STP centralised hub shall enter into an agreement with every STP service provider on the lines of the Model Agreement given in Schedule II.

#### SCHEDULE I

#### CODE OF CONDUCT FOR STP SERVICE PROVIDERS

#### (Clause 7 of the Guidelines)

- **a.** The STP service provider shall render at all times high standards of service, exercise due diligence, ensure proper care and exercise independent professional judgment.
- **b.** The STP service provider shall disclose to the clients its possible sources or potential areas of conflict of duties and interest and provide unbiased services.
- **c.** The STP service provider herein agrees and undertakes to perform its duties as a STP service provider with the highest standards of integrity and fairness in all its dealings.
- **d.** The STP service provider shall abide by the obligation as specified under these Guidelines and the terms of the agreement entered into by the STP service provider with the STP users / STP centralised hub.
- **e.** The STP service provider shall maintain true and correct record of the messages processed by it under the scheme and in particular the records in respect of:
  - i. the STP users
  - ii. the messages exchanged within the same STP service provider
  - iii. the messages exchanged with other STP service providers through the STP centralised hub
- **f.** The STP service provider shall ensure that the message is not misused or tampered with while in its possession.
- **g.** The STP service provider shall maintain confidentiality of information about its users and shall not divulge the same to other clients, the press or any other interested party except in accordance with law or as per the directions of any court of law.
- **h.** The STP service provider shall abide by all the provisions of the Act, Rules, Regulations, Guidelines, Resolutions, Notifications, Directions, Circular, etc. as may be issued by the Government of India / Telecom Regulatory Authority of India / Department of Telecommunications and Securities and Exchange Board of India from time to time as may be applicable to the STP service provider.

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#### SCHEDULE II

#### MODEL AGREEMENT BETWEEN STP CENTRALISED HUB AND STP SERVICE PROVIDER

#### (Clause 8 of the Guidelines)

 THIS AGREEMENT is made at \_\_\_\_\_\_ on this the\_\_\_\_ day of \_\_\_\_\_\_,

 200\_\_\_\_\_ between \_\_\_\_\_\_\_ having its Registered office at \_\_\_\_\_\_\_ (hereinafter referred to as the 'STP Centralised Hub' which expression shall, unless it be repugnant to the context or the meaning thereof, be deemed to include its successors, legal representatives and assigns) of the First Part;

 And

 a

Company incorporated under the Companies Act, 1956 and having its registered office at

(hereinafter referred to as the 'STP Service Provider' which expression shall unless it be repugnant to the context or the meaning thereof, be deemed to include its successors, legal heirs, legal representatives and assigns as the case may be) of the Second Part.

#### WHEREAS

- 1. The Securities and Exchange Board of India has mandated Straight Through Processing (hereinafter referred to as 'STP') for facilitating settlement of institutional trades.
- 2. In terms of the Securities and Exchange Board of India (STP Centralised Hub and STP Service Providers) Guidelines, 2004 an agreement has to be entered into between the STP Centralised Hub and the STP Service Provider.
- 3. The STP centralised hub has obtained such approval/s as may be necessary to function as a centralised hub.

#### NOW THIS AGREEMENT WITNESSETH AND IT IS HEREBY AGREED BY AND BETWEEN \_\_\_\_\_\_ AND \_\_\_\_\_ AS UNDER:

#### A. DEFINITIONS

- 1. DoT means Department of Telecommunications, India, Government of India and /or its successors.
- 2. EFFECTIVE DATE: The date on which this Agreement is entered into.
- 3. EMERGENCY means an emergency of any kind, including any circumstances whatever resulting from major accidents and natural disasters.
- 4. INTERNET: Internet is a global information system that:
  - ? is logically linked together by a globally unique address, based on Internet Protocol (IP) or its subsequent enhancements / upgradations;

- ? is able to support communications using the Transmission Control Protocol / Internet Protocol (TCP/IP) suite or its subsequent enhancements / upgradations, and all other IP compatible protocols; and
- 5. "TELECOM AUTHORITY" shall mean The Director General, DoT, Government of India and includes any officer empowered by him to perform all or any of the functions of the Telegraph Authority under the Indian Telegraph Act, 1885 or such other authority as may be established by law.
- 6. "TRAI" shall mean the Telecom Regulatory Authority of India established under the TRAI Act, 1997.

# A. FEES PAYABLE BY STP SERVICE PROVIDER –

The STP Service Provider agrees to pay Fees as listed in the Annexure in consideration for the services provided by STP centralised hub hereof. The said fees may be revised by STP centralised hub as may be mutually agreed upon with the STP Service Providers. The STP service provider shall also be liable to pay interest @\_\_\_% p.a. in case of delay in payments on the amount due till the actual date of payment.

## **B.** STP SERVICE PROVIDER OBLIGATION

- 1. The STP Service Provider shall obtain a digital signature certificate from a Certifying Authority, which has been issued a license by the Controller of Certifying Authorities appointed under the Information Technology Act, 2000. A copy of the Certificate shall be submitted to STP centralised hub.
- 2. The STP Service Provider shall verify the Digital signature on the message of the STP User connected to the STP Service Provider before sending the message to the STP Centralized hub.
- 3. The STP Service Provider agrees to comply with the minimum specifications prescribed by STP centralised hub and as may be mutually agreed upon.
- 4. The STP Service Provider shall adhere to the guidelines prescribed by SEBI from time to time.
- 5. The STP Service Provider acknowledges that the software for STP Centralized Hub including the STP Centralized hub client software is the legal property of STP centralised hub. The permission given by STP centralised hub to access and use STP Centralized Hub through the STP Centralized hub client software will not convey any proprietary or ownership rights in the above software. The access of the STP Service Provider is limited to the STP Centralized hub Client software.
- 6. The STP Service Provider shall not attempt to modify, translate, disassemble, decompile or reverse engineer Centralized the STP Centralized hub client software or create any derivative product based on that software.
- 7. The STP Service Provider shall have a non-exclusive right to access STP Centralized Hub through the STP Centralized hub client software. This right is not transferable under any circumstances and shall be used by the STP Service Provider itself or by its authorized agent as may be mutually agreed.
- 8. The STP Service Provider shall not use the infrastructure or the facilities provided by STP centralised hub for any other purpose other than those mentioned in this Agreement.

- 9. The STP Service Provider shall indemnify STP centralised hub against any damage, loss, expenses, costs etc incurred by it due to negligence (intentional or unintentional) of the STP Service Provider.
- 10. The STP Service Provider shall ensure that by using the Hub client software provided by STP centralised hub
  - a. No damage will be caused to the STP Centralized hub, and that it does not propagate virus infected information
  - b. It will pass on only relevant information to be exchanged with the other STP service provider.
  - c. It will not try to probe any other information available on the STP Centralized Hub

## C. STP CENTRALISED HUB OBLIGATIONS

- 1. STP centralised hub shall obtain a digital signature certificate from a Certifying Authority, which has been issued a license by the Controller of Certifying Authorities appointed under the Information Technology Act, 2000. A copy of the Certificate shall be submitted to STP service provider.
- 2. STP centralised hub acknowledges that STP infrastructure of the STP service provider is the legal property of STP service provider. The permission given by STP service provider to STP centralised hub's STP hub client software to co-locate on STP infrastructure will not convey any proprietary or ownership rights in the STP infrastructure.
- 3. STP centralised hub may subcontract and employ agents to carry out any of its obligations under such terms and conditions as may be mutually agreed.
- 4. STP centralised hub shall be solely responsible for installation, networking and operation of applicable systems. STP centralised hub shall clearly display and publicise specifications of STP Service Providers terminal equipment at Service Provider premises which are necessary for interfacing to network.
- 5. STP centralised hub shall abide by the guidelines issued by SEBI from time to time on the STP framework.
- 6. STP centralised hub shall confirm authenticity, integrity and non-repudiability of all messages submitted by the STP Service Provider.
- 7. The STP Centralized Hub would keep complete track of the flow of messages for record and audit.
- 8. STP centralised hub shall ensure that only the intended STP Service Provider receives the message.
- 9. STP centralised hub shall not misuse/ alter / reverse engineer / decompile the content of the messages submitted by the STP Service Providers.
- 10. STP centralised hub will digitally sign all messages sent from the STP Centralized Hub to the STP Service Provider.
- 11. STP centralised hub agrees to PKI enable the STP Hub client software within --------- months after the agreement would come into force. STP centralised hub shall digitally sign all messages at STP Centralized Hub prior to sending it to STP Service Providers. hub client software will maintain unsigned logs of such events.
- 12. STP centralised hub shall indemnify the STP service provider against any damage, loss, expenses, costs etc incurred by it due to its negligence (intentional or unintentional). STP centralised hub shall not use the infrastructure or the

facilities provided by STP service provider for any other purpose other than those mentioned in this Agreement.

- 13. Hub client software provided by STP centralised hub will ensure that :
  - a. No damage will be caused to the service providers system.
  - b. It will not propagate virus infected information
  - c. It will pass on only relevant information to be exchanged with the other STP service provider.
  - d. It will not try to probe any other information available on the STP Service Providers setup
  - e. It will not try to modify, translate, disassemble, de-compile or reverse engineer the software to gain access to restricted information or create any derivative product based on STP service provider's system.

### **D. COMPLIANCE WITH LAWS**

- 1. Both the parties represent that they have taken all necessary corporate action to authorise the execution and consummation of this agreement and shall furnish satisfactory evidence of the same upon request to other party.
- 2. Both the parties hereto agree that they shall comply with all applicable Central, state and local laws, ordinances, regulations and codes in performing their obligations hereunder, including the procurement of licenses, permits and certificates and payment of taxes where required.
- 3. The parties shall fully inform themselves of all necessary obligations and statutes under Indian Law (including the security measures prevalent in India) and shall not hold the other party responsible for any lapse in this regard. This shall include, but not be limited to, the knowledge and understanding of the physical, environmental and technical standards required for the provision and operation of the Equipment, software and services within India. The monetary obligations, if any, devolving on either of the parties due to statutory changes subsequent to the conclusion of the Agreement, shall be borne by the respective party, if applicable.

## F. SERVICE CHANGES AND DISCONTINUATION

STP centralised hub shall if directed by regulatory authorities, suspend the STP Service Provider's access to the STP Centralized Hub at any time without notice. The STP Service Provider agrees that STP centralised hub will not be liable to any third party for any modification or discontinuance of the STP Centralized Hub. If STP centralised hub receives prior notice of such direction it shall be communicated to the service provider immediately.

In order to maintain the security and integrity of the service STP centralised hub may also suspend the STP Service Provider's access to the STP Centralized Hub. The STP Service Provider agrees that STP centralised hub will not be liable to or any third party for any modification or discontinuance of the STP Centralized Hub. The Parties shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the arrangement. In the case of any issues arising out of the security and integrity of the messages being exchanged through the hub, the same shall be resolved by mutual discussion. In the event the parties are not able to settle the same within the time frame agreed between the parties either party may, by written notice of 30 days sent to the other party, temporarily suspend the arrangements, in whole or in part, till the parties find a technical solution to the security and technical issues. The notice of termination shall specify the termination is at whose instance, the extent to which performance of the agreement is suspended, and the date upon which such suspension becomes effective.

## E. FORCE MAJEURE

If the performance of any obligations by any party as specified in this agreement is prevented, restricted, delayed or interfered by reason of force majeure then notwithstanding anything hereinbefore contained, the party affected shall be excused from its performance to the extent such performance relates to such prevention, restriction, delay or interference and provided the party so affected uses its best efforts to remove such cause of non-performance and when removed the party shall continue performance with utmost urgency. For the purpose of this clause "Force Majeure" means & includes fire, explosion, cyclone, floods, war, revolution, blockage or embargo, any law, order, demands or requirements of any Government or statutory authority, strikes, which are not instigated for the purpose of avoiding obligations herein or any other circumstances beyond the control of the party affected.

## F. AMENDMENT TO THE AGREEMENT

The rights and obligations of the parties are governed only by this agreement. This agreement may be amended, altered, modified, varied or added to from time to time only by a written instrument duly signed by both the parties to this agreement. All previous communications, both oral and written between the parties and related to this agreement, but inconsistent with the terms and conditions of this agreement, are hereby declared null and void.

# I. VALIDITY

This Agreement is valid so long as STP service provider holds valid approval from SEBI and STP centralised hub holds valid approval as STP Centralised Hub from SEBI. This Agreement shall be valid for an initial period of \_\_\_\_\_ years (hereinafter referred to as the 'Term'). After the term, the arrangement may be extended on mutually acceptable terms.

## G. TERMINATION

Without prejudice to the rights, liabilities, interests and obligations that have accrued to the parties prior to the date of terminations

- 1. Either party may terminate this agreement upon material breach by the other of any provision of this agreement, and (if such breach is remediable) that other fails to remedy such breach within a mutually agreed time frame in writing.
- 2. This agreement may, at any time during its Term, be terminated by either party by a written 90 days notice to the other party without prejudice to the rights, liabilities,

interests and obligations that have accrued to the parties prior to the date of such termination. The grounds upon which this agreement may be terminated pursuant to this clause are as under:

- i) In case a Receiver has been appointed with respect to all or substantially all the assets of the parties. Provided that this clause shall not be applicable when winding up proceedings have been initiated to facilitate an amalgamation with another company proposing to carry on the same business
- ii) if one of the parties enters into an arrangement of composition with its creditors.
- 3. This agreement may, at any time during its Term, be terminated by STP centralised hub by a written notice in case the ISP license of STP centralised hub is revoked or the services are taken over by DoT / Telecom Authority in the event of an emergency or otherwise. If STP centralised hub receives prior notice of the same it shall be provided to the service provider immediately.
- 4. This agreement may, for convenience, at any time during its term, be terminated by either party, by a written notice of 90 days to the other party.
- 5. The provisions contained hereinabove shall not preclude the other party from recourse to any other remedies available to itself by statute or otherwise, at law or in equity.
- 6. In order to maintain the security and integrity of its infrastructure STP service provider may also suspend the STP hub client software access to its system at any time without notice.

## H. NOTICE

Any notice to be given by one party to the other pursuant to this agreement shall be sent by registered post A.D., speed post or facsimile transmission to the address mentioned below:

 1. \_\_\_\_\_\_\_\_(NAME OF THE STP CENTRALISED HUB)

 \_\_\_\_\_\_(ADDRESS)

2. \_\_\_\_\_(NAME OF STP SERVICE PROVIDER) \_\_\_\_\_(ADDRESS)

# I. WAIVER OF RIGHTS

No forbearance, delay or indulgence by any party in enforcing any of the provisions of this agreement shall prejudice or restrict the rights of that party nor shall any waiver of its rights operate as a waiver of any subsequent breach and no rights, powers, remedies herein conferred upon or reserved for the parties is exclusive of any other right, power or remedy available to that party and each right, power or remedy shall be cumulative.

# J. ARBITRATION AND JURISDICTION

In the case of any dispute or any difference between the parties arising out of or in relation to this agreement including dispute or difference as to the validity of this agreement or interpretation of any of the provisions of this agreement or losses or damages arising under clause C-8 and the relevant clause under STP Centralizedized hub of this agreement, the same shall be resolved by mutual discussion. If the parties fail to settle the dispute or difference mutually, then the same shall be resolved in accordance with and subject to the provisions of the Arbitration and Conciliation Act, 1996 or any modifications or amendments thereto, or any enactment for the time being in force subject to the stipulation that only courts at Mumbai shall have exclusive jurisdiction in all such matters. The provisions of this clause shall survive the termination of this agreement.

## K. GOVERNING LAW

- 1. This agreement shall be governed by and construed and interpreted in accordance with the laws of India, SEBI Act, Regulations, Rules and SEBI (STP centralised hub and STP service providers) Guidelines, 2004.
- 2. If any term or provision of this agreement should be declared invalid by a court of competent jurisdiction, the remaining terms and provisions of this agreement shall remain unimpaired and in full force and effect.

## M. DISCLAIMER

STP centralised hub shall use its best endeavor only to ensure that the services provided shall be in conformity with the terms of this agreement. STP centralised hub shall not be liable for bad/slow connection or any technical glitches on account of reasons beyond its control.

# N. CONFIDENTIALITY

The Parties hereto shall at all times maintain and keep secret and confidential any know-how, information and data which it has or may acquire from time to time relating to the business, activities or operations of the other Party and shall not disclose or divulge the same or any part thereof to any third party. The terms of this clause shall survive termination of the Agreement.

The obligations shall not apply with respect to Information which :

- 1) is or becomes publicly available other than through a breach of this Agreement or is unlawfully appropriated;
- 2) is already in the possession of the other party without any breach of this Agreement ;
- 3) is obtained by the other party from a third party without any breach of this Agreement
- 4) is required to be produced before a judicial authority and only where the other party is compelled to do so by such an authority, provided that the said authority ( or individual representing such authority ) has the authority, under the laws in force, to compel such disclosure.

Notwithstanding the foregoing, before making any use or disclosure on any of the foregoing exceptions, the Party disclosing such information shall intimate the Other Party as soon as practicable the applicable exceptions (s) and circumstances giving rise thereto.

## ANNEXURE

STP centralised hub shall charge a fee of Rs. -----. The fees shall be charged to the sending service provider. The billing shall be on a ------ basis.

One message shall mean and include the following -

- ? One ISO message sent by a service provider to the STP centralised hub
- ? Acknowledgement message sent by the STP centralised hub to the Sending service provider
- ? The message forwarded to the receiving service provider
- ? Acknowledgement received from the receiving service provider for the message
- ? Forwarding the acknowledgement received from the receiving service provider to the sending service provider

In consideration of the fees STP centralised hub shall endeavour to provide the following service standards –

#### Infrastructure availability

- 99% Uptime for business hours from 0930 hrs till 1930 hrs computed on a quarterly basis. Planned Outage excluded
- Uptime on best effort basis between 1930 hrs to 0930 hrs
- Resolution time: 4 hours for called logged between 0930 to 1800 hrs

#### Trouble Ticketing

Business Hrs Helpdesk	- Telephonic reporting of Fault on STP centralised hub
Non-Business Hrs	- Telephonic reporting of Fault on STP centralised hub
Operations Call closure confirmation	- STP service Provider to give respective telephone
numbers	

# **10.9.** APPENDIX 7

#### CHIEF GENERAL MANAGER DERIVATIVES AND NEW PRODUCTS DEPARTMENT

DNPD/Cir-25/04 June 10, 2004

All Exchanges, Clearing Corporation / Clearing House, STP Centralised Hub Depositories, Custodians, AMFI and STP service providers

#### <u>Sub: Transaction work flow for the system of Straight Through Processing in the</u> <u>Indian Securities Market and standardisation of the messaging formats</u>

Dear Sir,

- This is in continuation to our previous circular no. DNPD/Cir-9/04 dated February 3, 2004 & circular no. SEBI/MRD/SE/Cir-11/2004 dated February 25, 2004 on the issuance of electronic contract notes as a legal document like the physical contract note for the equity and debt segments, circular no. DNPD/Cir-22/2004 dated April 1, 2004 mandating the use of the Straight Through Processing (STP) system for all institutional trades w. e. f. July 1, 2004, circular no. DNPD/Cir-23/04 dated April 27, 2004 prescribing the detailed system flow of the STP system and circular no. DNPD/Cir-24/04 dated May 26, 2004 prescribing the SEBI (STP centralised hub and STP service providers) Guidelines, 2004.
- 2) SEBI in consultation with the STP centralised hub, STP service providers and the STP users has prescribed the transaction work flow for the STP system. All institutional investors shall follow the following transaction work flow on a mandatory basis from July 1, 2004:
  - a) A contract note in electronic form in the prescribed format (IFN 515 messaging format) shall be issued by the broker & sent to the custodian and / or the institutional investor.
  - b) In case the contract note is processed directly by the institutional investor, the institutional investor shall send the trade confirmation of acceptance or rejection of the contract note to the broker by using the IFN 598 messaging format. The custodian shall also send the confirmation of acceptance or rejection of such contract note to the broker using the messaging standard IFN 548.
  - c) In case the contract note is processed by the custodian on behalf of the institutional investor, the custodian shall send the confirmation of acceptance or rejection of the contract note to the broker by using the IFN 548 messaging format.

- d) The institutional investor shall send settlement instructions to its custodian in IFN 540 to IFN 543 messaging formats to the custodian for the following trade types:
  - i) IFN 540: settlement instruction for a clearing house buy trade
  - ii) IFN 541: settlement instruction for a delivery-v/s-payment (DVP) buy trade
  - iii) IFN 542: settlement instruction for a clearing house sell trade
  - iv) IFN 543: settlement instruction for a delivery-v/s-payment (DVP) sell trade
- e) The custodian shall confirm / reject the execution of the settlement instructions to the institutional investor in IFN 544 to IFN 547 messaging formats in the following manner:
  - i) IFN 544: confirmation / rejection of an instruction received in messaging format IFN 540
  - ii) IFN 545: confirmation / rejection of an instruction received in messaging format IFN 541
  - iii) IFN 546: confirmation / rejection of an instruction received in messaging format IFN 542
  - iv) IFN 547: confirmation / rejection of an instruction received in messaging format IFN 543
- f) It is clarified that if a message (for the activities mentioned above) is sent using the STP centralised hub framework from one user to another user, then the confirmation / rejection for such a message shall also be sent using the STP centralised hub framework.
- 3) SEBI vide circular no. DNPD/Cir-9/04 dated February 3, 2004 had prescribed the format of the contract note in electronic form. After deliberation with the STP service providers and the market participants the following changes are incorporated to the existing messaging format (IFN 515):
  - a) The mandatory requirement of mentioning the relevant bye-laws / rules / regulations of the exchange subject to which the said contract note is being issued on each contract note stands modified in the following manner:
    - i) The requirement is not mandatory but optional
    - ii) The broker shall ensure that the relevant bye-laws / rules / regulations of the exchange subject to which the contract note is being issued, is mentioned in the broker-client agreement and the tripartite agreement between the broker-sub-broker-client agreement (if applicable).
    - iii) The existing field for the above provision shall not be deleted and may be used as a free text field for one constituent to communicate remarks (if any) to another constituent.
  - b) The clause of 'payment of consolidated stamp duty' for each contract note shall be mentioned in the broker-client agreement and the tripartite agreement between the broker-sub-broker-client agreement (if applicable). The said clause may be stated in the free text field (as mentioned in point 3 (a (iii))) of each contract note.
  - c) In the field "market type" (field 70E) a category of 'TT' i.e. trade for trade and 'OT' i.e. Others shall be added to represent the supplementary categories of market types.

- d) The order time was prescribed as a mandatory field in the contract note. The order time shall now be included in the optional fields.
- e) There are certain securities which are not de-materalised and hence do not have an ISIN code. For such securities (where ISIN number is not available) the STP users would be required to input the security code given by the exchange in the ISIN number field. In case the number length of the exchange scrip code is shorter than the prescribed field length of 12 characters, the code shall be prefixed with zeros.
- f) In order to maintain a complete audit trail, it is clarified that in case an electronic contract note is rejected, the custodian (in messaging format IFN 548) or the fund manager (in messaging format IFN 598) shall be required to send a rejection message to the broker. Only on receipt of the rejection message, the broker shall cancel the rejected contract note and issue a fresh contract note bearing a new number.
- g) In order to bring in standardisation in the input of the identification codes in the prescribed messaging standards, it is clarified that the following codes shall be used by the various entities:
  - i) **Brokers**: SEBI registration number (until MAPIN ID is available for every broker)
  - ii) <u>Mutual Funds and schemes of Mutual Funds:</u> SEBI registration number for Mutual Funds and Unique client code issued by the exchanges for schemes (until MAPIN ID is available for each scheme of a mutual fund)
  - iii) **FIIs and sub-accounts:** SEBI registration number for FII and Unique client code issued by the exchanges for sub-account (until MAPIN ID is available for each FII and their sub-accounts)
  - iv) <u>**Custodians:**</u> SEBI registration number (until MAPIN ID is available for every custodian)
  - v) STP service providers and STP centralised hub: MAPIN ID
  - vi) <u>Depositories and exchanges / clearing house / clearing corporation:</u> MAPIN ID.
  - vii) Other Institutional Investors like financial institutions, banks etc.: Unique client code issued by the exchanges (until MAPIN ID is available for each Institutional Investor)
- h) All market participants shall issue the electronic contract note for institutional trades in the modified format enclosed in **Annexure I. (refer URL:**<u>http://www.sebi.gov.in</u>)
- 4) The prescribed messaging formats for IFN 540, IFN 541, IFN 542, IFN 543, IFN 544, IFN 545, IFN 546, IFN 547, IFN 548 and IFN 598 are enclosed in Annexure II. (refer URL:<u>http://www.sebi.gov.in</u>). After consultation with the market participants and confirming their preparedness, it has been decided to make these messaging formats (in addition to IFN 515) mandatory for all institutional trades w. e. f. July 1, 2004.

- 5) It is reiterated that the STP system shall be initially mandatory for all institutional trades in the equity segment w. e. f. July 1, 2004.
- 6) The standard terms of contract as are required to be mentioned in the Contract Notes as per the Bye-laws and Regulations of exchanges, which are not contained in electronic contract notes, shall be incorporated in the Client Broker Agreement or where applicable, the Tripartite Agreement between the stock broker, sub-broker and the client. The stamp duty in respect of the electronic contract notes shall be paid by the broker.
- 7) This circular is being issued in exercise of powers conferred by section 11 (1) of the Securities and Exchange Board of India Act, 1992, read with section 10 of the Securities Contracts(regulation) Act 1956, to protect the interests of investors in securities and to promote the development of, and to regulate the securities market.

Yours sincerely,

# N. PARAKH