RMB Equity
Trading Support Facility (TSF)
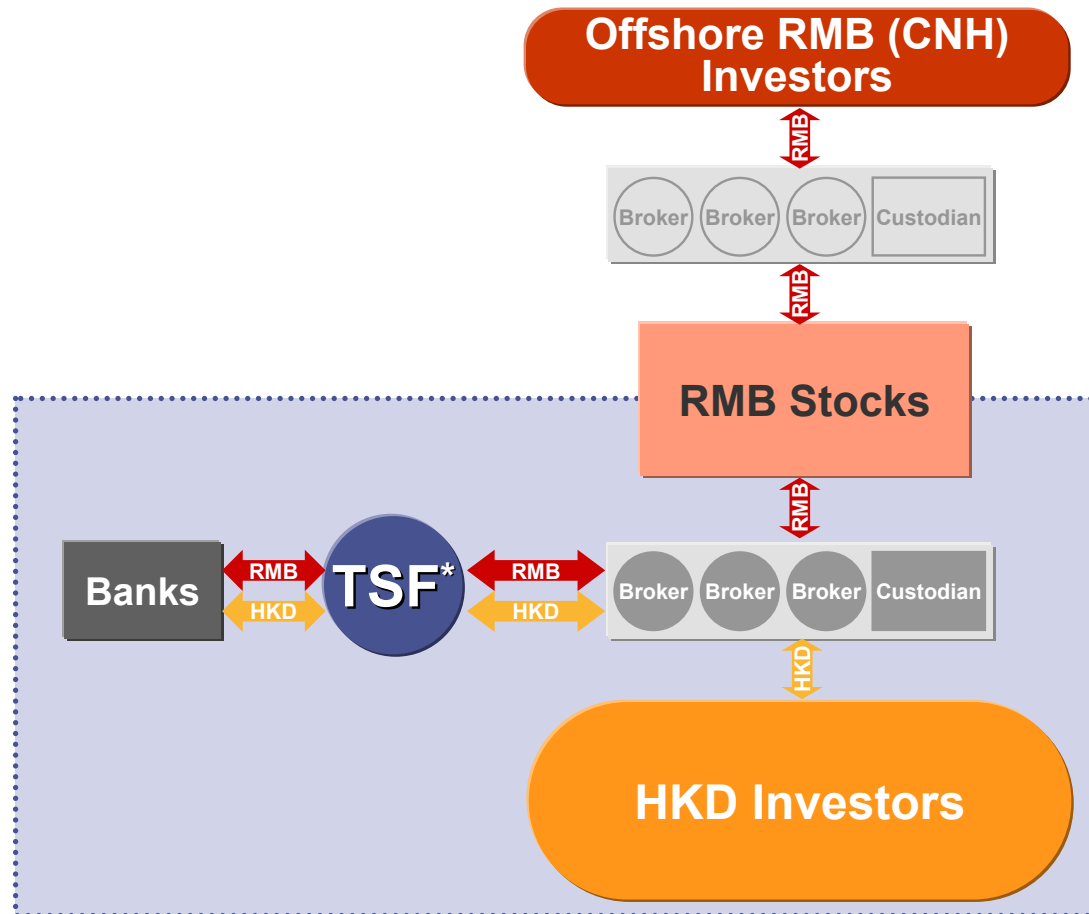
2nd Round Briefing to Participants
May & June 2011

Agenda

Overview of TSF

Offshore RMB (CNH) Investors

⬍ RMB

[Broker | Broker | Broker | Custodian]

⬍ RMB

RMB Stocks

⬍ RMB

Banks ⬌ RMB / HKD ⬌ **TSF*** ⬌ RMB / HKD ⬌ [Broker | Broker | Broker | Custodian]

⬍ HKD

HKD Investors

Key Features

Back-up

Re-cycle

Open (but optional) to all brokers / custodians

Committed in size, but commercially-priced

Subject to regulatory approval

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Overview of TSF

Scope
- Only support secondary market trading of equities
- Not support fund raising (such as IPO and rights)
- Only available to TSF Eligible Participants

Trading
- Optional to use TSF
- Indicate use of TSF in AMS/3 for each order (no change in AMS/3 interface)
- In extreme situation, TSF may be suspended intra-day

FX
- Reference rates (Ceiling for Broker Buy / Floor for Broker Sell) announced at the beginning of each trading session
- Execution rates (Buy / Sell) announced after each trading session

Money Settlement
- Leverage existing CCASS money settlement arrangements
- Normally, brokers should pay TSF by 3pm on T+2

Share Earmarking
- Two segregated accounts (17) & (18) will be designated to TSF Eligible Participants for earmarking shares bought through TSF
- CCASS will automatically transfer shares into or out of TSF account (18) for earmarking or de-earmarking

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Agenda

Indicate use of TSF when input orders
Input "TSF" in Reference / Broker Comment Fields

- **TSF only support trades automatically struck through AMS/3 (i.e. auto-matched trades)**

- **TSF orders are orders in the form of:**

  For Buy order – At-Auction Order and Special Limit Order

  For Sell order – All Order Types

  > **... AND**

  with indicator "TSF" input in the first three characters in

  - **'Ref' field for Terminal / MWS users or**
  - **'Broker Comment' field for BSS users**

PRE/SP	BUY ORD	STOCK	0	PRICE	0.000	QTY	0	
	BROKER		TYPE S	AON? N	REF TSF		SS? N	TC

- **TSF orders can be input into AMS/3 during the Pre-opening Session and Continuous Trading Session**

- **TSF request is for the whole order, i.e. broker has to input separate orders if a client wants to use TSF for part of its order only**

- **Committed to use TSF once order is auto-matched in AMS/3**
  (i.e. irrevocable once TSF trades are matched in AMS/3)

MWS = Multi-workstation System; BSS = Broker Supplied System

FX rates available on HKEx website

Reference Rates For Morning Session*: around 9:30 am

For Afternoon Session*: before 1:00 pm

Execution Rates For TSF trades concluded in Pre-opening* and Morning Sessions: around 12:45 pm

For TSF trades concluded in Afternoon Session: around 4:45 pm

- **TSF FX rates (in HKD per RMB) will be published on HKEx website**
  - **Morning/Afternoon Reference Buy/Sell rates**
  - **Morning/Afternoon Execution Buy/Sell rates**

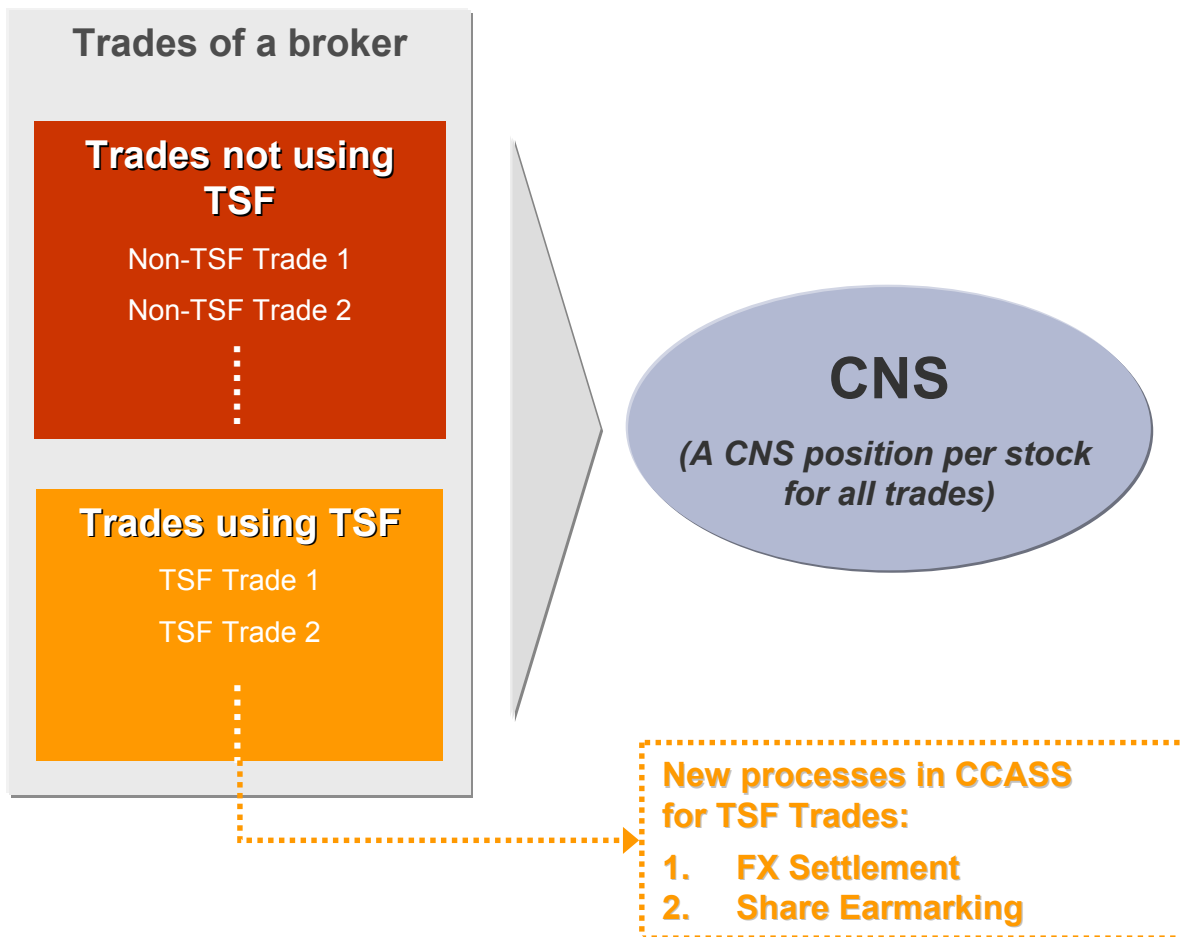| [in HKD per RMB]	TSF **BUY** RMB (from brokers)	TSF **SELL** RMB (to brokers)
Morning Reference Rates	1.1715	1.1735
Morning Execution Rates	1.1725	1.1730

- **Execution Rates will be equal to or better than the Reference Rates of the respective session**
- **Historical TSF FX rates (up to 2 months in CSV format) will also be available on HKEx website under TSF Web Corner**
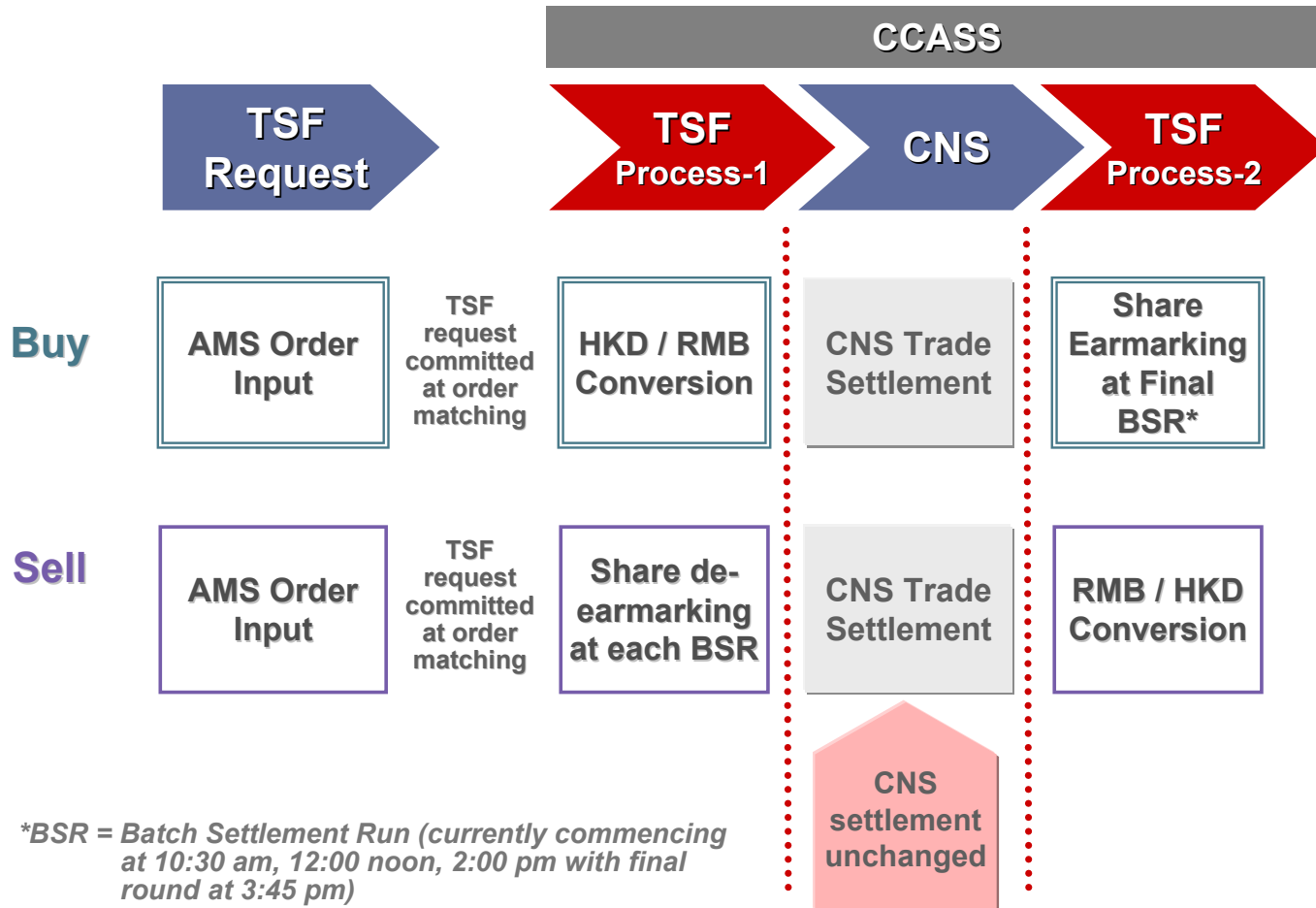
Notes:
- *TSF Trades executed in the Pre-opening Session (9:00am – 9:30am) also subject to the spread of the Morning Reference Rates*
- *Morning Session (9:30am – 12:00noon); Afternoon Session (1:30pm – 4:00pm)*

CNS process remains unchanged
New CCASS processes for TSF Trades

Trades of a broker

Trades not using TSF

Non-TSF Trade 1

Non-TSF Trade 2

Trades using TSF

TSF Trade 1

TSF Trade 2

CNS

(A CNS position per stock for all trades)

New processes in CCASS for TSF Trades:

1. **FX Settlement**
2. **Share Earmarking**

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Two new CCASS processes
- before and after CNS settlement

CCASS

TSF Request		TSF Process-1	CNS	TSF Process-2

Buy

AMS Order Input	TSF request committed at order matching	HKD / RMB Conversion	CNS Trade Settlement	Share Earmarking at Final BSR*

Sell

AMS Order Input	TSF request committed at order matching	Share de-earmarking at each BSR	CNS Trade Settlement	RMB / HKD Conversion

CNS settlement unchanged

BSR = Batch Settlement Run (currently commencing at 10:30 am, 12:00 noon, 2:00 pm with final round at 3:45 pm)

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How to calculate and settle the FX obligation?

| **Each TSF Trade** | **Calculate HKD equivalent by applying Execution Buy / Sell Rates of respective trading sessions** |

| **For each TSF Stock** | **Sum all HKD and RMB respectively for TSF Trades of the same stock**

➢ **If broker needs to pay HKD to TSF, broker should pay full amount**
➢ **If broker needs to pay RMB to TSF,**
　• **CNS proceeds will be used to cover TSF RMB payment;**
　• **If CNS proceeds are not sufficient to cover the TSF RMB payment, broker pays the difference to TSF** |

| **For each TSF Participant** | **Net all conversion amounts of all stocks to one FX position (i.e. broker either pays HKD or RMB to TSF)** |

| **Settlement on T+2** | **Normally, broker should pay TSF upfront by 3pm via RTGS/bank transfer**
TSF pays broker via evening / overnight DCI |

Refer to Appendix 4 for a numerical illustration of TSF payment calculation

How to determine the number of shares to be earmarked or de-earmarked? How to settle?

For each TSF Stock

> Net all TSF Buy / Sell transactions for each TSF Stock – Resulting either a Net Buy or a Net Sell Position

Share Transfer on T+2

> **For Net Buy Positions – CCASS earmarks shares by transferring shares from Clearing A/C 01 to TSF A/C 18 after the Final BSR**
>
> - ➢ If TSF quantity > CNS quantity, broker has to further transfer the difference to the TSF A/C 18
>
> **For Net Sell Positions – CCASS de-earmarks shares by transferring shares from TSF A/C 18 to Clearing A/C 01 before each BSR**
>
> - ➢ If TSF quantity > CNS quantity, excess shares will be retained in Clearing A/C 01

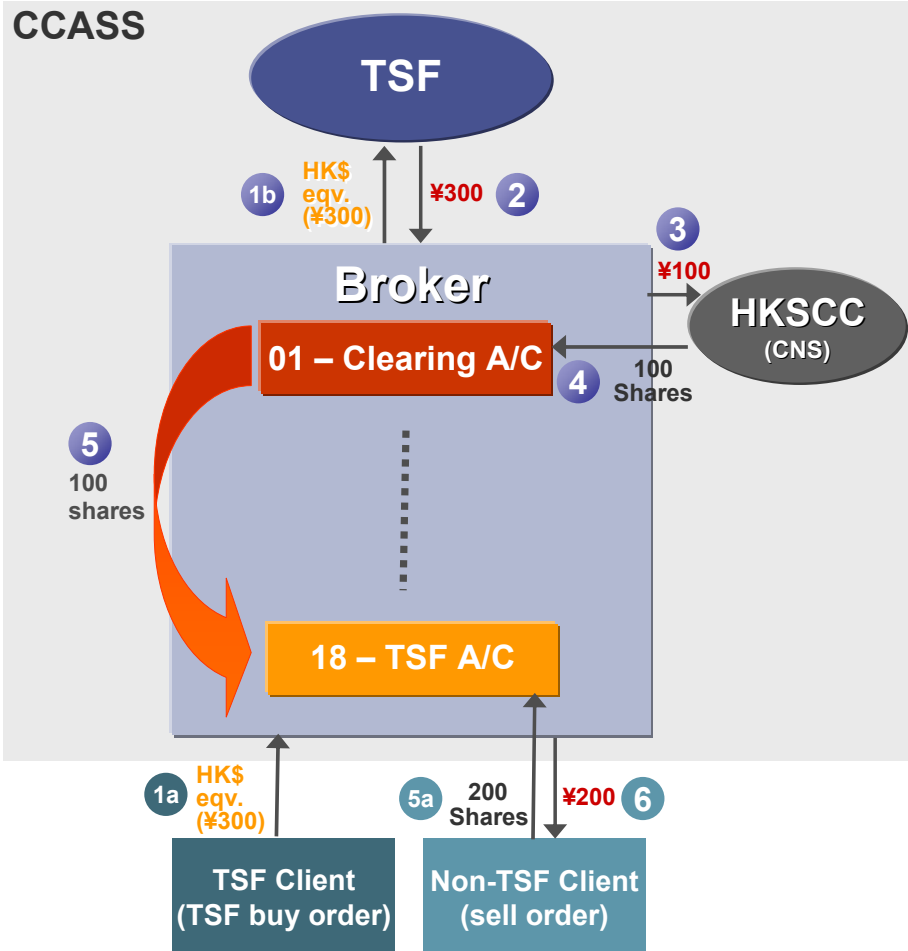# Settlement Flow for a Simple TSF Buy Transaction
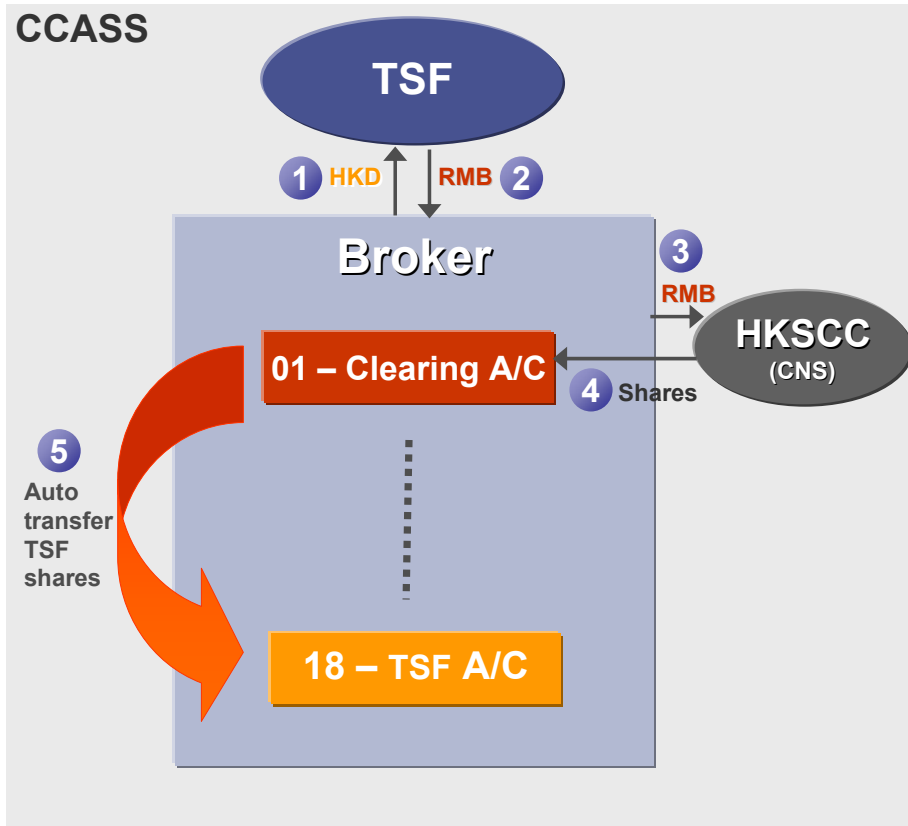
On T+2:

- **1** Broker pays HKD to TSF via RTGS / Bank Transfer by 3pm

- **2** TSF converts HKD received into RMB

- **3** **4** CCASS processes CNS settlement as usual

- **5** CCASS earmarks TSF Net Buy Quantity by transferring shares automatically from Clearing A/C 01 to TSF A/C 18 after Final BSR

Refer to Appendix 1 for numerical illustration

I have a TSF Buy Position
What will happen if shares received from CNS settlement are not sufficient for TSF to earmark?
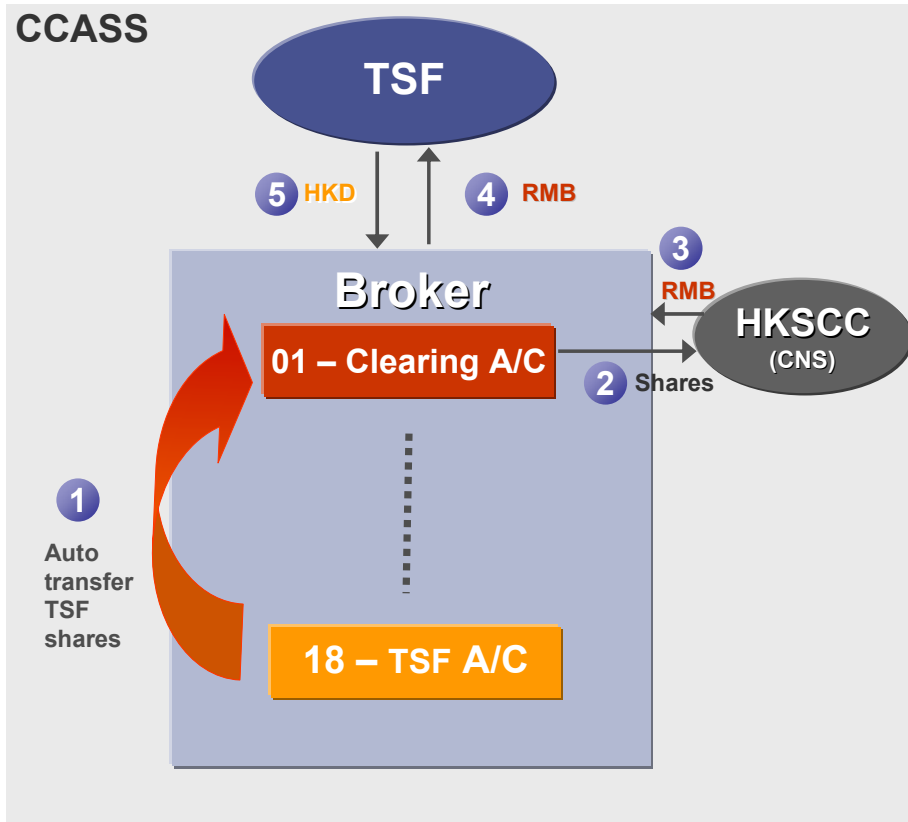
CCASS

TSF

HK$ eqv. (¥300) — 1b

¥300 — 2

3

¥100

Broker

01 – Clearing A/C

HKSCC (CNS)

4 — 100 Shares

5 — 100 shares

18 – TSF A/C

1a — HK$ eqv. (¥300)

5a — 200 Shares

¥200 — 6

TSF Client (TSF buy order)

Non-TSF Client (sell order)

- **Why would that happen?**
  - Some other clients sold the same stock without using TSF

For a particular TSF stock: Assume Share Price = ¥ 1		
TSF Buy	300 shs	- ¥300
Non-TSF Sell	-200 shs	¥200
CNS Net Buy	100 shs	- ¥100

- **Result:**
  - Shares to be received from CNS are not sufficient for TSF earmarking
  - RMB received from TSF is in excess of CNS settlement obligation
- **Two additional steps by broker:**
  - 5a Broker to transfer 200 shares (from non-TSF seller) to TSF A/C 18
  - 6 Broker to pay non-TSF seller the excess amount of RMB received from TSF

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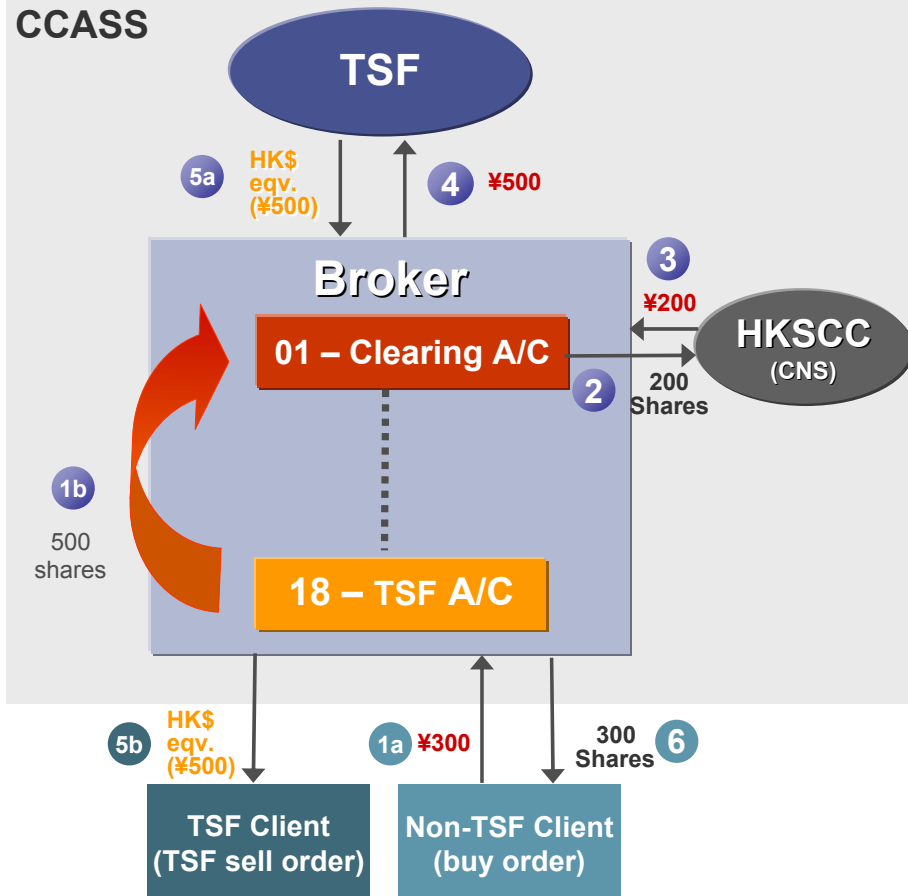# Settlement Flow for a Simple TSF Sell Transaction

On T+2:

- **①** CCASS de-earmarks net sell quantity by transferring shares automatically from TSF A/C 18 to Clearing A/C 01 before each BSR

- **②** **③** CCASS processes CNS settlement as usual

- **④** TSF converts RMB received into HKD

- **⑤** TSF pays broker HKD via DCI in the evening / overnight

Refer to Appendices 2 & 3 for numerical illustrations

I have a TSF Sell Position
What will happen if RMB received from CNS settlement is not sufficient to settle my TSF FX obligation?

CCASS

TSF

Broker

01 – Clearing A/C

18 – TSF A/C

HKSCC (CNS)

5a — HK$ eqv. (¥500)

4 — ¥500

3 — ¥200

2 — 200 Shares

1b — 500 shares

5b — HK$ eqv. (¥500)

1a — ¥300

300 Shares — 6

TSF Client (TSF sell order)

Non-TSF Client (buy order)

- **Why would that happen?**
  - Some other clients buy the same stock without using TSF

For a particular TSF stock: Assume Share Price = ¥ 1		
TSF Sell	-500 shs	¥500
Non-TSF Buy	300 shs	-¥300
CNS Net Sell	-200 shs	¥200

- **Result:**
  - De-earmarked TSF shares are more than shares to be delivered for CNS settlement
  - RMB to be received from CNS is not sufficient for covering TSF payment in RMB for TSF sell position
- **Two additional steps by broker:**
  - Broker pays difference (¥300) (1a probably from non-TSF buyer) to TSF by 3pm
  - Excess shares will be retained in Clearing A/C 01 (6 broker may deliver them to non-TSF buyer)

Refer to Appendices 2 & 3 for numerical illustrations

How do Brokers Pay TSF?
– RTGS, Bank Transfer and Evening Money Settlement

(1) **RTGS** (Standing instruction to CCASS)	• For HKD and RMB that should be paid by 3pm • Subscribe through existing function "Cash Prepayment Standing Instruction Maintenance" • On T+2, Designated Banks of the Clearing Participants will receive TSF payment instructions	**Payment Deadline: 3pm on T+2**

(2) **Others**	• Alternative to RTGS
	• Transfer to **Agent Bank** Accounts of TSF
	   ➢ **HSBC (for HKD payment)**
	   ➢ **BOC (for RMB payment)**
	through intra-bank transfer, remittance, etc	

(3) **CCASS Evening Money Settlement Run**	• For RMB payment, which was not designated for paying by 3pm (i.e. expecting to use the CNS RMB receivables to pay the TSF) • Debit entry will be posted to the money ledger after the final BSR, for collection at end of T+2	**Payment Deadline: 5:45pm on T+2 (as usual)**

Notes: If a broker fails to pay TSF payment by deadline, it is an event of default and the defaulting broker is required to bear all costs, losses and expenses incurred by HKSCC in connection with the broker's breach of its performance obligation

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How does TSF Pay Brokers?
– CCASS Evening / Overnight Money Settlement

- Will pay brokers after the TSF has received the respective HKD (to buy RMB) or RMB (to sell RMB) in full
- Through crediting brokers' money ledger

	Pay RMB to brokers	**Pay HKD to brokers**
(1) Evening CCASS Money Settlement Run	• Full RMB amount	• HKD amount equivalent to the RMB amount paid to TSF by 3pm AND • HKD amount equivalent to the RMB amount which was covered by the broker's overall net CNS settlement amount in RMB
(2) Overnight CCASS Money Settlement Run (settled on T+3, valued on T+2)		• *What to pay*: Remaining HKD amount not paid to brokers through the evening CCASS money settlement run • *Why through this channel*: Will only pay through this channel if the broker still has outstanding RMB payment to TSF before the evening run (i.e. the overall net CNS settlement amount in RMB cannot fully cover the RMB amount outstanding by then) • *Subject to broker's payment*: Only pay this portion after the remaining RMB amount not covered by CNS amount is received in full (by 5:45pm)

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Agenda

1	Overview
2	TSF Operation Flow
3	**TSF Share Handling**
4	New TSF Reports for Participants
5	Exception Management
6	Registration
7	Q & A

Can broker move shares in the TSF Accounts?

SI
- Only between TSF Accounts (17 & 18) of different TSF Eligible Participants
- Shares transferred to TSF Account 18 after CNS settlement at Final BSR can only be onward delivered to TSF Accounts of other participants on the following day

ATI
- Can transfer from any account to TSF Accounts for quantity up to
  - current day TSF to-be-earmarked quantity; and
  - overdue TSF earmarking requirements
- Can transfer between TSF Accounts (17 & 18)
- Cannot transfer out of TSF Accounts (including transfer to CCMS as specific stock collateral)

ISI / STI / DI
- Not allowed

New CCASS Function: Stock Release Request
- To transfer TSF Shares out of TSF Accounts by replenishing RMB to TSF
- Can be executed on any trade day. Shares will be released immediately once the request is authorized (T-day)
- Will calculate the RMB value to be replenished by applying the stock's closing price of the previous day and Execution Rate of the respective trading session where the request is authorized
- Need to replenish RMB value of the released shares to TSF by 3 pm on T+2 and in exchange, receive equivalent amount of HKD
- Refer to Appendix 5 for numerical example & sample screen

Corporate Actions Handling for TSF Shares

Consolidation / Splitting

- Unchanged – Convert at each stock account (i.e. TSF Account 17 or 18)

Other CA such as Bonus Shares / Scrip Dividends

- Unchanged – distribute to Entitlement A/C 02
- Additional flexibility – TSF Participant can
  - request to transfer part of or all its TSF entitlement shares to TSF A/C 17 or 18 by form submission
  - transfer quantity up to the entitlement portion received for TSF shares

* Cash dividend will be distributed in the currency as per issuer's announcement

Agenda

1	Overview

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3	TSF Share Handling

4	**New TSF Reports for Participants**

5	Exception Management

6	Registration

7	Q & A

New TSF Reports for Participants

Report Name	Available Time	Purpose of Report
1. TSF Confirmation Report	Daily 6 pm (from CCASS)	1. For brokers to verify TSF Trades / stock release requests on T day 2. For brokers to prepare T+2 settlement - Quantity of shares to be earmarked / de-earmarked - TSF Payment (HKD / RMB) by 3 pm - Projected CCASS money settlement details

2. TSF Conversion Request Activity / Status Report	Daily 9 pm (from CCASS)	Show status of TSF settlement & stock release request Payment on T+2:
		• TSF settlement status for TSF trades executed on T day
		  - Completed
		  - Exception (e.g. due to CNS unsettled, insufficient shares for earmarking, etc)
		• Stock release request payment status for requests authorized on T day

Agenda

1	Overview

2	TSF Operation Flow

3	TSF Share Handling

4	New TSF Reports for Participants

5	**Exception Management**

6	Registration

7	Q & A

Exception handling of TSF Trades
– What if brokers forgot to indicate in orders or indicated wrongly?

How can broker fix it?

Case 1	**Client instructed to buy through TSF**	**but**	**Forgot to indicate in Order**	• **Get RMB outside TSF to meet CNS obligation (if relevant)**
Case 2	**Client did not instruct to buy through TSF**	**but**	**Wrongly indicated in Order**	Input stock release request* in CCASS to: • **Release wrongly earmarked shares immediately** • **Return RMB to TSF two days after the stock release day**
Case 3	**Client did not instruct to sell through TSF**	**but**	**Wrongly indicated in Order**	• **Transfer shares to TSF A/C by ATI to complete transaction** • **Use HKD received from TSF to buy RMB outside TSF and then pay client***
Case 4	**Client instructed to sell through TSF**	**but**	**Forgot to indicate in Order**	Input stock release request* in CCASS to: • **Release earmarked shares immediately** • **Return RMB to TSF two days after the stock release day**

•*Brokers will have to bear FX cost when executing these transactions*

Agenda

How to become a TSF Eligible Participant?

Interested Participants should:

➢ Have confirmed their readiness for dealing and / or clearing transactions in RMB securities

➢ Contact internal IT department / BOS vendors for system enhancement under TSF (e.g. capability to handle TSF orders, segregation of TSF & non-TSF shares)

➢ Interested NCP should contact eligible GCP

➢ Review changes on internal policies, procedures and risk management measures of TSF

➢ *Indicate interest to become TSF Eligible Participants by end of July (details to be provided in TSF Web Corner in June)*

➢ *Participate in system test arranged by SEHK and / or HKSCC (3Q 2011)*

➢ *Submit registration requests after successful completion of system test*

Launch of TSF in 3Q / 4Q 2011

Subject to approval from SFC

More TSF information on the website

Visit TSF Web Corner at

www.hkex.com.hk

Home
- ➤ **Market Operations**
  - ➤ **Securities Trading Infrastructure**
    - ➤ **RMB Equity Trading Support Facility (TSF)**

Content:

- **Model and mechanism of TSF**
- **FAQ**
- **Checklist for SEHK & HKSCC participants**
- **Circulars (regarding registration, readiness, seminars, etc…)**
- **Other reference: e.g. briefing materials, sample reports**
- *List of TSF Eligible Securities / Participants (later stage)*

Questions and Answers

Appendices

Appendix 1: Settlement for FX Position & Share Earmarking on T+2
- *Buy* Conversion Request

- **For buy conversion request, brokers pay HKD to TSF for RMB**
- **Assume FX Rate (Buy): RMB 1 = HKD 1.19**

Stock	TSF Trade?	Quantity	RMB Amount	HKD Amount
82001	Y	1,000 (Buy)	- ¥2,500	- $2,975
CNS		1,000	- ¥2,500	N/A

On T+2:

FX Settlement:

Broker pays HKD 2,975 to TSF for conversion to RMB by 3 pm

The RMB will be paid to HKSCC for CNS settlement via DDI

Share Earmark:

After Final BSR, 1,000 shares will be transferred from Clearing Account 01 to TSF Account 18 for earmarking

Appendix 2: Settlement for FX Position & Share De-earmarking on T+2
- *Sell* Conversion Request (RMB from CNS)

- For sell conversion request, brokers pay RMB to TSF for HKD
- RMB either from CNS or payment by broker (see example below and Appendix 3 for illustration)
- Assume FX Rate (Sell): RMB 1 = 1.17 HKD

Stock	TSF Trade?	Quantity	RMB Amount	HKD Amount
82002	Y	- 900 (Sell)	¥1,300	$1,521
CNS		-900	¥1,300	N/A

On T+2:

FX Settlement:

In the above example, RMB from CNS (¥1,300) is sufficient to replenish TSF RMB Sell Amount (¥1,300) by 3 pm

Broker receives HKD instead of RMB from the TSF sell trade via Evening / Overnight DCI

Share De-earmark:

Before each BSR, TSF will de-earmark shares from TSF Account 18 to Clearing Account 01 up to 900 shares in total for CNS settlement

Appendix 3: Settlement for FX Position & Share De-earmarking on T+2
- *Sell* Conversion Request (RMB payment by broker)

■ **Assume FX Rate (Sell): RMB 1 = HKD 1.17**

Stock	TSF Trade?	Quantity	RMB Amount	HKD Amount
82003	Y	- 900 (Sell)	¥1,600	$1,872
	N	1,000 (Buy)	- ¥1,800	N/A
CNS		100	- ¥200	N/A

On T+2:

FX Settlement:

In the above example, no RMB will be received from CNS (payment of ¥200 to CNS is required), broker has to pay TSF RMB Sell Amount (¥1,600) to replenish TSF by 3 pm

Broker receives HKD from the TSF via Evening / Overnight DCI

Share De-earmark:

Before each BSR, TSF will de-earmark shares from TSF Account 18 to Clearing Account 01 up to 900 shares in total

Appendix 4: Settlement for FX Position on T+2
- Netting of Multiple TSF Conversion Requests

To reduce brokers' funding requirement, payments by broker to TSF for all stocks will be netted. After netting, broker will be required to pay the negative netted amount either in HKD or RMB* on each settlement day.

Netted Positions of each stock	HKD	RMB
TSF Buy for Stock A	- HKD	+ RMB
TSF Sell for Stock B	+ HKD	- RMB
⋮	⋮	⋮
Sum of all netted positions of each stock	- HKD	+ RMB
Broker to pay TSF in HKD# by 3pm		

If the RMB amount is negative, broker to pay TSF in RMB by 3pm

In rare situation, brokers will have to settle both HKD & RMB payment if net payment amounts are negative for both currencies.

Appendix 4: Settlement for FX Position on T+2
- Netting of Multiple TSF Conversion Requests

- **FX positions of all TSF stocks will be netted to form one FX position**
- **Broker will settle payment either in HKD or RMB^**
- **Below are the conversion requests from Appendices 1 - 3**

Conversion Requests (Buy/Sell)	TSF Buy / Sell Amt	CNS Amt	Payment CCY to TSF	Pay Amt to TSF	Converted CCY	Converted Amt
82001 (B)	- ¥2,500	- ¥2,500	HKD	- $2,975	RMB	¥2,500
82002 (S)	¥1,300	¥1,300	RMB	0*	N/A	N/A
82003 (S)	¥1,600	- ¥200	RMB	- ¥1,600	HKD	$1,872
Net TSF Payment Amounts			HKD	-$2,975 + $1,872 = - $1,103		
			RMB	- ¥1,600 + ¥2,500 = ¥900		

Broker has to pay TSF if the netted amount is negative.
(In this example, broker has to pay HKD1,103 to TSF on T+2)

^In rare situation, brokers will have to settle both HKD & RMB payment if net payment amounts are negative for both currencies.

*For Stock 82002, the CNS amount RMB1,300 to be received is enough to cover the TSF sell conversion amount RMB1,300, therefore broker is not required to pay RMB to TSF for Stock 82002.

Appendix 5: New CCASS Function
- Stock Release Request

A broker requests for releasing 300 shares of Stock 82004 from TSF Account 18 for transfer to Stock Account 06

During T Day Morning Session:

Time	Account 18 Balance	Account 06 Balance	Final RMB Sell Conversion Rate on T Day Morning Session
Before Authorization	1000	0	RMB 1 = HKD 1.15
After Authorization	700	300	

On T+2 : Money Settlement

Closing price of Stock 82004 on T-1	RMB 55
Broker replenishes RMB to TSF by 3pm #	RMB 55 * 300 = RMB16,500
TSF pays HKD equivalent to broker via DCI at day-end	RMB 16,500 * 1.15 = HKD 18,975

#RMB payment of stock release requests will be collected separately from those of the TSF conversion requests for secondary market trades

Stock Release Request Screen Sample
(Refer to Appendix 5)