TSD's adaptation for new product initiatives

ACG: New services and initiatives of CSDs

June 21, 2023
TSD Profile

Shareholder: Wholly-owned by the Stock Exchange of Thailand (SET)
Board of Director: Composed of executives from SET and independent directors

Core functions

- Securities Deposit / Withdrawal /Transfer (scripless)
- Settlement:
  - Real-Time Gross Settlement for OTC bond settlement
  - Settlement for on-Exchange trans with CCP
    - Non-fractional shares
    - Fractional shares New
  - Settlement for on-Exchange trans no CCP – LiVEx New
- National Numbering Agency (NNA)
- Corporate Actions News Announcement (SWIFT & Non-SWIFT)

Services for Issuer

- Record issuer’s information
- Prepare and maintain registrar book up-to-date
- Distribute entitlements for corporate actions

Services for Shareholders

- Deposit, withdraw and transfer (certificate)
- Change and up-to-date shareholders’ information
- TSD Counter Service and Contact Center
- Other Services (e-Dividend/ Investor Portal)

Products

<table>
<thead>
<tr>
<th>Depositor</th>
<th>Equity and Debt securities</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Bank of Thailand</td>
<td>(2) Securities Companies</td>
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<tr>
<td>(3) Financial Institutions</td>
<td>(4) Life or Non-life Insurers under insurance law</td>
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<tr>
<td>(5) Mutual fund trustee</td>
<td>(6) Securities issuers</td>
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Adaptation for new product initiatives

➢ DRx (Fractional DR)

➢ LiVE Exchange
**DRx (Fractional Depositary Receipts) (1/2)**

- **Small ticket investment**
  DRx does not require high initial investment, investors can trade in fractional units or Baht.

- **Never miss out on investment opportunities**
  Stay up to date on market movements and trade during the same hours as the foreign markets.

- **Return from foreign investments**
  Receive the same returns and benefits as if investing directly in foreign exchanges.

- **In line with digital asset concept**
  Pre paid & real-time settlement.

- **Pioneer product for shorter settlement cycle**
  T or T+1

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**Primary market**

1. Collect demand from Thai investor
2. Buy foreign underlying shares
3. Safekeep foreign underlying shares
4. Request to Create DRx
5. Direct listing on exchange
6. Credit DRx into members’ account

**New**
TSD can record the unit of DRx in a decimal number

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**Foreign Underlying Share**

- **Foreign Stock Exchange**
  2. Buy foreign underlying shares

- **Foreign Custodian**
  3. Safekeep foreign underlying shares

- **DRx Issuer**
  1. Collect demand from Thai investor
  4. Request to Create DRx

**Secondary market**

- Create/Redeem DR on real time basis
- Validate transaction against securities profile approved by regulator

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**(Live: 27 June 2022)**
Secondary market

1. Must have shares with broker before trading
   Investor (Sell)  →  Selling Broker
   2. Order
   →  SET
   3. Deal
   →  TCH
   4. Securities Settlement
   →  TSD
   5. Cash

1. Deposit cash with broker before trading
   Investor (Buy)  →  Buying Broker
   2. Order
   →  SET
   3. Deal
   →  TCH
   4. Securities Settlement
   →  TSD
   5. Shares

Key concept:
- Pre-paid where cash will be freeze-dated at designated account by CCP and securities will be checked and locked before trades.
- Real-time settlement (securities & cash)

New: TSD can record the unit of DRx in a decimal number

Note: Corporate-action process of DRx will apply the same flow with common shares.
Key Concept:
1. Pre-paid / No CCP / conduct on Gross Settlement basis within the same day of trading date
2. Securities: settle via TSD system
3. Cash: settle via
   3.1 Bank of Thailand's system (BATHNET) for high value transaction with across banks
   3.2 Commercial Bank for any transactions apart from 3.1

Settlement Flow:

Auction: 9.30-11.00
Settlement: 12.30-14.00 on T

1. Deposit cash with broker before trading
2. Order
   Investor (Buy) → Buying Broker
3. Order
   Buying Broker → LiVE Exchange
4. Deal
   LiVE Exchange → Selling Broker
5. Earmark shares of Selling’s broker
6. Send payment request
   Commercial Bank
7. Transfer shares to buying broker when receiving payment confirmation from bank

Note: Corporate-action process of LiVEx products will apply the same flow with common shares.