



## General Data Use Policy





# Terminology

## Capitalized terms

**MDP** = Market Data Policies

**IMDP** = Indices Market Data Policies

**IDA** = Indices Data Agreement

**JDA** = JSE Data Agreement

**PSF** = Products and Services Form

**EOD** = End of Day





## General Data Use Policy

- Derived data
- Stock exchange news service
- Controlled access to the service
- Interest rate market reports (IRM reports)
- Distribution of live data and/or delayed data as official end of day market statistics
- Direct market access (DMA)
- Limited extracts





7.2

## Derived Data



## 7.2 Derived Data

**JDA definition:** Derived data means any data (including products or compilations) derived from or based on the data, by the recipient of the data.

Sasol (SOL) EQM  
Sasol (SOL) CFD

Bid: R222.06  
Bid: R223.06 (+1)

Offer: R222.51  
Offer: R223.51 (+1)



## 7.2

## Derived Data

Fees (as per the price list/s) are applicable to the creation and/or use of derived data.

Sasol (SOL) EQM

Sasol (SOL) CFD

Bid: R222.06

Bid: R223.06 (+1)

Offer: R222.51

Offer: R223.51 (+1)



## 7.2

## Derived Data

If the underlying value or price of any data which is used in the derived data can be accessed or identified (by calculation or reverse-engineering), then the contracted user must pay the usual pricing for that use.

Sasol (SOL) EQM

Bid: R222.06

Offer: R222.51

Sasol (SOL) CFD

Bid: R223.06 (+1)

Offer: R223.51 (+1)





## Example of a Derived Data calculation:

Our derived price formation mechanism utilizes algorithms which incorporate proprietary XYZ information as a random variable to adjust the output price/s we provide to XYZ clients. The proprietary information we would be using is XYZ market exposure. The direction and level of exposure determines the direction and amount of adjustment made.





## Example of a Derived Data calculation:

The non-predictability or non-reverse-engineerability of the derived price will be guaranteed by the fact that the direction and size of the adjustment will be based on XYZ exposure which cannot be predicted, and where XYZ exposure is zero, the adjustment will be based on the output of a random number generator which will output a new random number at random periods in time.





## Example of a Derived Data calculation:

In addition, we will be widening both the bid and the offer by one tick to satisfy the requirement that derived prices cannot show a bid or offer which is equal to the JSE bid or offer at any time. We will also widen either the bid or the offer by an additional tick to make the adjustment unpredictable and non-reverse-engineerable.





## Example of a Derived Data calculation:

In simplest form with Boolean adjustment factor the derived price algorithm can be described as following:

$$(B_d, A_d) = \begin{cases} (B - k_{b1} * \delta, A + k_{a1} * \delta), & \text{if } B > \delta \text{ and } (E > 0 \text{ or } (E = 0 \text{ and } R > 0.5)) \\ (B - k_{b2} * \delta, A + k_{a2} * \delta), & \text{if } B \leq \delta \text{ or } E < 0 \text{ or } (E = 0 \text{ and } R \leq 0.5) \end{cases}$$

Where

$(B_d, A_d)$  – derived Bid and Ask

$(B, A)$  – Original Bid and Ask

$E$  – Exposure value

$\delta$  – Tick increment value

$k_{b1}, k_{b2}, k_{a1}, k_{a2}$  – Integer coefficients (i.e.: 1, 2, 2, 1)

$R$  – Random value in the range  $[0, 1]$

In case  $E == 0$ , the new value is recalculated after random number of seconds uniformly distributed in the interval  $[1...30]$  (\*or similar scale), unless exposure changes before, forcing recalculation without use of random value.

EXAMPLE

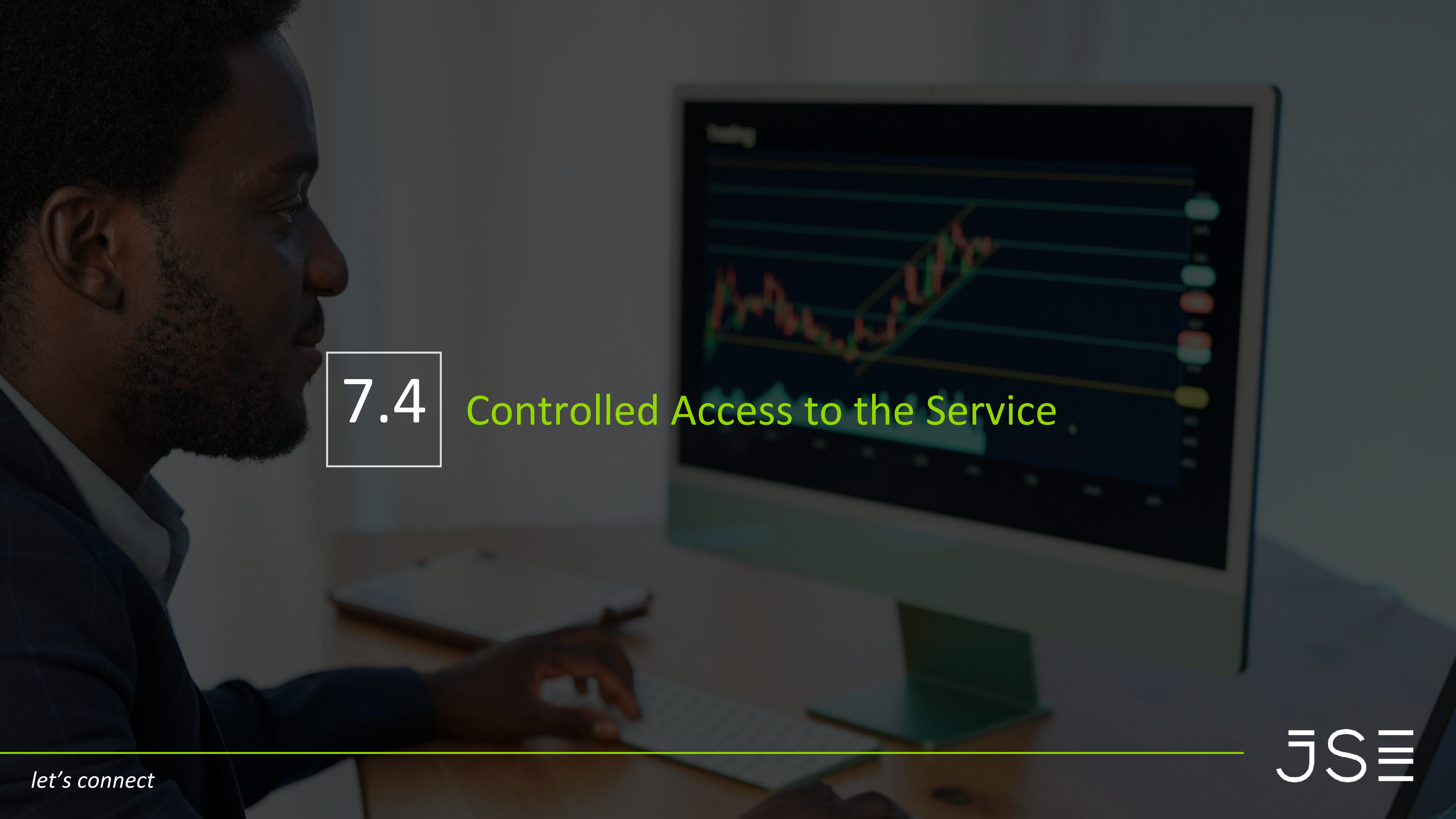


## 7.3

### Stock Exchange News Service

- SENS: Important information related to JSE listed companies (including price sensitive information).
- Intended to be made available as soon as possible after it has been provided to the JSE.
- Must be distributed in a form identical to that provided by the JSE.
- Only set of data that can be distributed on a live basis publicly (websites/terminals) without any end user fees and/or controls in place.



A man with a beard is shown in profile, looking at a computer monitor. The monitor displays a candlestick chart with green and red bars, overlaid with a blue trend line and horizontal grid lines. The background is dark and out of focus.

7.4

## Controlled Access to the Service



## 7.4

## Controlled Access to the Service

### 7.4.1. General

Principle: all data may only be used in a controlled user environment.

JDA definition: controlled user environment means an environment in which every user is capable of being easily identified (by way of user ID or otherwise).



## 7.4

## Controlled Access to the Service

### 7.4.1. General

Delayed data may, however, be distributed in an uncontrolled user environment.

JDA definition: **uncontrolled user environment** means an environment in which a user has access to data which is generally accessible to an indefinite number of unidentifiable users (such as the Internet).



## 7.4

## Controlled Access to the Service

### 7.4.1. General

Must have/install reasonable controls, security and logistical systems (passwords; identifiers) to prevent any unauthorized use of any data.

NB for auditing; tracking; reporting and billing purposes  
No system/control = liability



## 7.4

## Controlled Access to the Service

### 7.4.2. Multiple User ID

User may require access to the same data from different devices  
e.g. mobile | terminal | desktop | office | home



## 7.4

## Controlled Access to the Service

### 7.4.2. Multiple User ID

Multiple User ID's for the same User are permissible, if user ID's are limited to the same user and data on the various devices & cannot be accessed concurrently.



## 7.4

## Controlled Access to the Service

### 7.4.2. Multiple User ID

Multiple User ID's offering requires JSE approval.  
Technical controls must be in place to prevent concurrent access of the data.



## 7.4

## Controlled Access to the Service

### 7.4.2. Multiple User ID

If requirements are not adhered to, multiple User fees for the same user will be charged.





## 7.5 Interest Rate Market Reports (IRM Reports)



## 7.5

### Interest Rate Market Reports (IRM Reports)

IRM Reports subscriptions/fees are charged per entity.

Unlike other licences/product fees which are generally applicable to all group companies listed in the JDA PS.



## 7.5

## Interest Rate Market Reports (IRM Reports)

If a contracted user is licensed for and receives the IRM reports they are able to provide them to other group companies if the group companies are listed in the JDA PSF IRM section and if the group companies is licensed/billed for the IRM reports (Internal use only).



7.6

## Distribution of Live Data and/or Delayed Data as official End of Day Market Statistics



## 7.6

# Distribution of Live Data and/or Delayed Data as official End of Day Market Statistics

Live and delayed data licence fees cover the distribution of data during the JSE trading day.



## 7.6

# Distribution of Live Data and/or Delayed Data as official End of Day Market Statistics

If a snapshot of the live or delayed data is taken during and/or at the end of the JSE trading day, and the 'snapshot' data is provided as official JSE end of day market statistics, then considered a distributor of end of day market statistics.

1. Data agreement
2. Data fees for distribution of end of day data
3. End user fees applicable



## 7.6

# Distribution of Live Data and/or Delayed Data as official End of Day Market Statistics

**Live Data** = End user that receives the unofficial end of day market statistics data, and is a paying live terminal end user fee, no additional end user fee is payable.



## 7.6

# Distribution of Live Data and/or Delayed Data as official End of Day Market Statistics

**Delayed Data** = If last traded values are left unchanged on the display until the next trading day (last trade, not close), no end of day data fees.

Intent/Objective.



The background of the slide is a photograph of a person sitting on a balcony, looking out at a city skyline. The person is seen from behind, wearing a light-colored sweater. The balcony has a metal railing. The city skyline is visible through the large glass windows of the building, with various buildings and structures visible in the distance. The overall tone of the image is somewhat muted and artistic.

## 7.6 Limited Extracts



## 7.6

## Limited Extracts

**Limited Extracts** = limited extracts of data, which must:

1. Not be continuous; not be live data.
2. Be provided infrequently.
3. Be incidental to the end users main business.
4. Not be capable of being used as a substitute for the use of any data.
5. Have no independent commercial value.
6. Not be used for any commercial information brokering, information vending, publishing or credit rating, for reproduction through the press or media.



## 7.6 Limited Extracts

Any contracted user who receives data in accordance with the agreement (licence/fees/psf/usage) can provide limited extracts thereof to end users, without end users incurring fees and/or agreement.





Thank you





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