

INTEGRATED TRADING AND CLEARING (ITAC)

**Instrument Reference Data
Quick Reference Guide**

The logo for ITaC, featuring the letters 'ITaC' in a large, bold, green font. To the right of 'ITaC' is the tagline 'INTEGRATE ACCELERATE GROW' in a smaller, bold, black font. The background of the logo area consists of concentric green circles and a vertical line, resembling a target or a radar screen.

ITaC **INTEGRATE
ACCELERATE
GROW**

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1. Document Purpose

The Integrated Trading and Clearing (ITaC) project involves the migration of the Equity Derivatives and Currency Derivatives markets to the new trading, market data and post-trade technology of the JSE. This document explains the Instrument reference data standards and changes being introduced as part of the project.

This document should be read in conjunction with [Volume 09D – JSE Reference Data Management](#)

2. Document Information

Drafted By	JSE Information Services
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3. Revision History

Date	Version	Description
March 2017	1.0	Initial document draft and release
12 April 2017	1.1	Updated with the full list of ITaC Instrument Types and mapping to csv files
21 April 2017	1.2	Added examples of all possible Contract Codes for each Instrument Type
8 May 2017	1.3	Change made to the Contract Code convention for JSE Index and Options
17 May 2017	1.4	Added a table to explain the Contract code defaults
30 August 2017	1.5	Correction made on the instrument types created as a result of a Corporate Action. Single Stocks and International Equities on a basket underlying are created as a result of an Unbundling or Partial Conversion. Also corrected Contract Code lengths where the example did not correspond to the length specified. The examples are correct.

18 September 2017	1.6	<p>Updated section 6.2 to show the Short Instrument type code for the Instrument type names so that the Non live Market data reports can clearly associate the short codes in the reports with the actual Instrument name</p> <p>Updated “CONVENTION - STRUCTURED PRODUCTS OPTION” to show the convention for Delta Options on Structured Products.</p>
8 November 2017	1.7	<p>Removed Instrument Type FWDFWD from scope for Project 1b and c go-live.</p> <p>Added Exotic Options on International Equity underlying in scope for Project 1b/1c go live</p>
05 March 2018	1.8	<p>Added the details for section 6.3 - Old to New Instrument Types Mapping to explain the mapping of Nutron Instrument type = IDXDIV to the new Instrument type in the Reference Data system. Also, explained the mapping of Nutron Instrument type = DIVF to the new instrument type</p> <p>Added Section 6.4 with an explanation around 2 Indices on the same underlying but having different strike Interval.</p>
04 July 2018	1.9	<p>Added the section 5.1.1.3 and 5.1.2.3 to explain the Contract code convention for Inverse Calendar Spreads. Updated the Structured Product section to indicate that the ‘Incremental Number’ may in fact be an alphanumeric code, as per the data that has been published in previous Market Dress Rehearsals.</p> <p>Added the explanation for Corporate Action Identifier in the Contract code for Futures, Options and Inverse Calendar Spreads</p> <p>Updated the section about Index Strike intervals to reflect the final market decision.</p>
16 July 2018	1.10	<p>Added a section to explain the two different types of CFDs loaded with different Base Rates.</p>
11 October 2018	1.11	<p>Updated the Contract Code convention for International Index Derivatives to include the Contract Size.</p>
6 November 2018	1.12	<p>Corrected the Basket descriptions in Section 6.2.1 to read ‘Basket (created as a result of a Unbundling / Partial Conversion)’</p>
1 April 2019	1.13	<p>Changes to the Instrument type Code to reflect the Contract level type code for Exotic Option on International Equity Underlying</p>

4. Contact Details

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5. Instruments Identifiers

There are three unique instrument identifiers for derivative instruments

- [Contract Code](#)
- [International Securities Identification Number \(ISIN\)](#)
- [Instrument ID](#)

5.1 Contract Code

The new Contract Code in the ITaC solutions is an alphanumeric field (A-Z, a-z, 0-9) which is derived based on certain attributes of the system(s). This code is replacing the existing four characters Contract Code of the current legacy Derivatives system. A mapping will be provided between the old and the new Contract Codes for each instrument. The purpose of this field is to provide a clear and user friendly description of the instrument. Examples of a contract code are:

- 01DEC15 AGL PHY ANY DN
- 01DEC15 AGL PHY ANY 23.99C
- 17DEC15 GOOGL CSH
- 01DEC15 GOOGL CSH QUANTO 23.99C
- 17DEC15 ALSI MINI
- 01DEC15 USDZAR ANYDAY
- 17DEC15 USDZAR QUANTO 23.999C
- 15JUN17 USDZAR

The following conventions are used to derive the Contract Code for the various instrument types:

5.1.1 Equity Derivatives in ITaC

5.1.1.1 Futures

CONVENTION - FUTURE - EQUITY DERIVATIVES				
(e.g. 17DEC15 GOOGL CSH ANY DN MAXI)				
Components of Contract Code	Values	Example/Acronym	Max Characters	
Expiry Date		'17DEC15	7	
			1	Space
Underlying Alpha Code		AGL ALSI GOOGL GOOGLQ	6	
			1	Space
Settlement type	Cash	CSH	3	
	Physical	PHY		
			1	Space
Anyday Expiry (Note – this is only displayed for Anyday instruments)			3	
	Anyday	ANY		
			1	Space
Detail (Note – this is only displayed if applicable)	Dividend Neutral	DN	6	
	Quanto	QUANTO		
	Dividend Neutral Quanto	DN QUA		
	CFD	CFD		
	Delta Option	DEL		
			1	Space
Local Deposit JSE Code (Only for CFD)	SAFEY/RODI	SAFEY/RODI	5	The max characters is variable and will depend on the length of the JSE Code captured
	SABOR	SABOR		
			1	Space
Contract Size Type (Note – if the Contract Size Type is 'Base', nothing is displayed)	Maxi	MAXI	4	
	Mini	MINI		
	Corporate Action Odd Contract Size	CA<#>*		
			1	Space
Contract Size (only applicable for International Index Derivatives)	Numeric Number	Examples: 10 or 1	3	
MAX LENGTH			40	

5.1.1.2 Options

CONVENTION - OPTION - EQUITY DERIVATIVES				
(e.g. 01DEC15 GOOGL CSH DN QUA MAXI 23.999C)				
Components of Contract Code	Values	Example/Acronym	Max Characters	
Expiry Date		17DEC15	7	
			1	Space
Underlying Alpha Code		AGL ALSI GOOGL GOOGLQ	6	
			1	Space
Settlement type	Cash	CSH	3	
	Physical	PHY		
			1	Space
Anyday Expiry (Note – this is only displayed for Anyday instruments)	Anyday	ANY	3	
			1	Space
Detail (Note – this is only displayed if applicable)	Dividend Neutral	DN	6	
	Quanto	QUANTO		
	Dividend Neutral Quanto	DN QUA		
	CFD	CFD		
	Delta Option	DEL		
			1	Space
Contract Size Type (Note – if the Contract Size Type is 'Base', nothing is displayed)	Maxi	MAXI	4	
	Mini	MINI		
	Corporate Action Odd Contract Size	CA<#>*		
			1	Space
Contract Size (only applicable for International Index Derivatives)	Numeric Number	Examples: 10 or 1	3	
			1	Space
Strike Price		124.67	13	
Option Type	Call	C	1	
	Put	P		
MAX LENGTH			49	

5.1.1.3 Inverse Calendar Spreads

CONVENTION – Inverse Calendar Spreads - EQUITY DERIVATIVES				
(e.g. 17SEP15/17DEC15 GOOGL CSH ANY DN MAXI)				
Components of Contract Code	Values	Example/Acronym	Max Characters	
Near Expiry Date		17SEP15	7	
		/	1	Filler
Far Expiry Date		'17DEC15	7	
			1	Space
Underlying Alpha Code		AGL ALSI GOOGL GOOGLQ	6	
			1	Space
Settlement type	Cash	CSH	3	
	Physical	PHY		
			1	Space
Anyday Expiry (Note – this is only displayed for Anyday instruments)	Anyday	ANY	3	
			1	Space
Detail (Note – this is only displayed if applicable)	Dividend Neutral	DN	6	
	Quanto	QUANTO		
	Dividend Neutral Quanto	DN QUA		
	CFD	CFD		
	Delta Option	DEL		
			1	Space
Contract Size Type (Note – if the Contract Size Type is 'Base', nothing is displayed)	Maxi	MAXI	4	
	Mini	MINI		
	Corporate Action Odd Contract Size	CA<#>*		
			1	Space
Contract Size (only applicable for International Index Derivatives)	Numeric Number	Examples: 10 or 1	3	
MAX LENGTH			42	

5.1.1.5 Structured Products

CONVENTION - STRUCTURED PRODUCTS FUTURE				
(e.g. 19DEC15 GOOGL EXF XS11)				
Components of Contract Code	Values	Example/Acronym	Max Characters	
Expiry Date		'17DEC15	7	
			1	Space
Underlying Alpha Code		AGL ALSI GOOGL GOOGLQ BSK001 AUDZAR USDZAR CADZAR CADCNH	6	
			1	Space
Settlement type	Cash	CSH	3	
	Physical	PHY		
			1	Space
Detail (Note – this is only displayed if applicable)	Variance Future	VRF	3	
	Exotic Option	EXO		
	Exotic Future	EXF		
			1	Space
UniqueAlphanumeric code (only applicable for Exotic Future and Exotic Option)		XS11	4	
MAX LENGTH			27	

* Any Tradable Instrument that has gone through a Corporate action, that results in a new contract size, will have a Contract Size Indicator with an incremental number appended to its Contract Code e.g. CA + '1', CA + '2' etc

The purpose of appending the Contract size indicator is to ensure that NO two tradable instruments with exactly the same instrument parameters but only different contract size will look the same.

CONVENTION - STRUCTURED PRODUCTS OPTION				
(e.g. 01DEC15 BSK001 CSH 23.999C)				
Components of Contract Code	Values	Example/Acronym	Max Characters	
Expiry Date		'17DEC15	7	
			1	Space

Underlying Alpha Code		AGL ALSI GOOGL GOOGLQ BSK001 AUDZAR USDZAR CADZAR CADCNH	6	
			1	Space
Settlement type	Cash	CSH	3	
	Physical	PHY		
			1	Space
Detail (Note – this is only displayed if applicable)	Exotic Future	EXF	3	
	Delta Option	DEL		
			1	Space
Unique Alphanumeric code (only applicable for Exotic Future and Exotic Option)		XS11	4	
			1	Space
Strike Price		124.67	13	
Option Type	Call	C	1	
	Put	P		
MAX LENGTH			42	

5.1.2 Currency Derivatives

5.1.2.1 Futures

CONVENTION - FUTURE - CURRENCY DERIVATIVES				
(e.g. 17DEC15 AUDZAR QUANTO)				
Components of Contract Code	Values	Example/Acronym	Max Characters	
Expiry Date		'17DEC15	7	
			1	Space
Underlying Alpha Code		AUDZAR USDZAR CADZAR CADCNH	6	
			1	Space
Anyday Expiry (Note – this is only displayed for Anyday instruments)	Anyday	ANYDAY	6	
			1	Space
Detail (Note – this is only displayed if applicable)	Quanto	QUANTO	6	
	Delta Option	DEL		
			1	Space
Contract Size Type (Note – if the Contract Size Type is 'Base', nothing is displayed)	Maxi	MAXI	4	
MAX LENGTH			33	

5.1.2.2 Options

CONVENTION - OPTION - CURRENCY DERIVATIVES				
(e.g. 01DEC15 AUDZAR QUANTO 23.999C)				
Components of Contract Code	Values	Example/Acronym	Max Characters	
Expiry Date		'17DEC15	7	
			1	Space
Underlying Alpha Code		AUDZAR USDZAR CADZAR CADCNH	6	
			1	Space
Anyday Expiry (Note – this is only displayed for Anyday instruments)	Anyday	ANYDAY	6	
			1	Space
Detail (Note – this is only displayed if applicable)	Quanto	QUANTO	6	
	Delta Option	DEL		
			1	Space
Contract Size Type (Note – if the Contract Size Type is 'Base', nothing is displayed)	Maxi	MAXI	4	
			1	Space
Strike Price		124.67	13	
Option Type	Call	C	1	
	Put	P		
MAX LENGTH			48	

5.1.2.3 Inverse Calendar Spreads

CONVENTION – Inverse Calendar Spreads - EQUITY DERIVATIVES				
(e.g. 18SEP15/18DEC15 USDZAR CSH ANYDAY MAXI)				
Components of Contract Code	Values	Example/Acronym	Max Characters	
Near Expiry Date		18SEP15	7	
		/	1	Filler
Far Expiry Date		'18DEC15	7	
			1	Space
Underlying Alpha Code		AUDZAR USDZAR CADZAR CADCNH	6	
			1	Space
Anyday Expiry (Note – this is only displayed for Anyday instruments)	Anyday	ANYDAY	6	
			1	Space
Detail (Note – this is only displayed if applicable)	Quanto	QUANTO	6	
	Delta Option	DEL		
			1	Space
Contract Size Type (Note – if the Contract Size Type is 'Base', nothing is displayed)	Maxi	MAXI	4	
MAX LENGTH			41	

5.1.2.4 Structured Products

CONVENTION - STRUCTURED PRODUCTS FUTURE				
(e.g. 19DEC15 GOOGL EXF XS11)				
Components of Contract Code	Values	Example/Acronym	Max Characters	
Expiry Date		'17DEC15	7	
			1	Space
Underlying Alpha Code		AGL ALSI GOOGL GOOGLQ BSK001 AUDZAR USDZAR CADZAR CADCNH	6	
			1	Space
Settlement type	Cash	CSH	3	
	Physical	PHY		
			1	Space
Detail (Note – this is only displayed if applicable)	Variance Future	VRF	3	
	Exotic Option	EXO		
	Exotic Future	EXF		
			1	Space
Unique Alphanumeric code (only applicable for Exotic Future and Exotic Option)		XS11	4	
MAX LENGTH			27	

CONVENTION - STRUCTURED PRODUCTS OPTION				
(e.g. 01DEC15 BSK001 CSH 23.999C)				
Components of Contract Code	Values	Example/Acronym	Max Characters	
Expiry Date		'17DEC15	7	
			1	Space
Underlying Alpha Code		AGL ALSI GOOGL GOOGLQ BSK001 AUDZAR USDZAR CADZAR CADCNH	6	
			1	Space
Settlement type	Cash	CSH	3	
	Physical	PHY		
			1	Space
Detail (Note – this is only displayed if applicable)	Exotic Future	EXF	3	
	Delta Option	DEL		
			1	Space
Unique Alphanumeric code (only applicable for Exotic Future and Exotic Option)		XS11	4	
			1	Space
Strike Price		124.67	13	
Option Type	Call	C	1	
	Put	P		
MAX LENGTH			42	

5.1.3 Rules

The following table explains how to interpret the rules if certain values do not appear in the Contract Code. This applies to all the above Contract Code conventions

Market Number <i>1 EDM</i> <i>2 FXM</i>	Underlying Type	Underlying Alpha Code	Settlement Type <i>blank</i> <i>CSH</i> <i>PHY</i>	AnyDay <i>blank</i> <i>ANY</i>	Additional Features <i>blank</i> <i>DN</i> <i>QUANTO</i> <i>DN QUA</i>	Contract Size <i>blank</i> <i>MAXI</i> <i>MINI</i> <i>SUPER</i>
1	JSE Listed Equity	Mandatory	If blank, assume CSH	If blank, Standard expiry applies	If blank, no additional features apply	If blank, assume BASE
1	JSE Index	Mandatory	If blank, assume CSH	If blank, Standard expiry applies	If blank, no additional features apply	If blank, assume BASE
1	International Equity	Mandatory	If blank, assume CSH	If blank, Standard expiry applies except for Quanto, which can have any expiry date	If blank, no additional features apply	If blank, assume BASE
1	International Index	Mandatory	If blank, assume CSH	If blank, Standard expiry applies except for Quanto, which can have any expiry date	If blank, no additional features apply	If blank, assume BASE
2	FX Pair	Mandatory	If blank, assume CSH	If blank, Standard expiry applies	If blank, no additional features apply	If blank, assume BASE
2	FX Index	Mandatory	If blank, assume CSH	If blank, Standard expiry applies	If blank, no additional features apply	If blank, assume BASE
1 or 2	Basket	Mandatory	If blank, assume CSH	Structured products can have any expiry date, although they are not called Anydays. No rule can be built for this.	If blank, no additional features apply	If blank, assume BASE

5.2 ISIN

This is the International Security Identification Number that is assigned to each tradable instrument. This is an ISO standard for the unique identification of instruments worldwide.

The following convention is applied for derivative instruments in the Equity Derivatives market:

- Futures: ZAD...
- Options: ZAD<*>...

The following convention is applied for derivative instruments in the Currency Derivatives market:

- Futures: ZAF...
- Options: ZAF<*>...

* The fourth character for options will start with 'A' and when all the numbers are used up, will increment to 'B', then 'C' etc. This is to cater for the large number of options that are created over time.

5.3 Instrument ID

Each instrument also has a unique number assigned to it. This number is unique across all the instruments in all the markets at the JSE.

6. Instrument Types

There are some changes to Instrument types introduced by ITaC. Some of the principle changes include the following:

- a. The correct Underlying names are used for all contracts e.g 17DEC15 ALMI will now be 17DEC15 ALSI MINI
- b. Many instrument types that are currently classified as Cando's will now have standardised instrument types and will not be part of 'Structured Products' e.g. Anydays and Quantos
- c. Dividend Neutral Changes
 In the current system (Nutron) the Dividend Neutral is a virtual contract meaning that when the Dividend Neutral (N) contract is traded the system creates an equivalent SSF (Q) and Dividend Future (F) in equal amounts, for example:
 - a. Member A Buy 100 15 Jun17 AGLN
 - i. Member A long 100 15 Jun17 AGLQ
 - ii. Member A long 100 15 Jun17 AGLF

As the Dividend on AGL goes Ex on the underlying market the JSE processes a Journal transaction to accommodate the Dividend going EX on the Dividend Future. In the new ITaC implementation the Dividend Future will no longer exist as the Dividend Neutral contract will now be "one" contract and the Journal transaction will be processed on this contract.

The main reason for the removal of the Dividend Future is because when some Members roll over their SSF contracts to the next expiry they do not always roll the Dividend Future

6.1 Full list of Instrument Types

Below is the complete list of Instrument types that are in scope for ITaC Project 1b (Equity Derivatives) and ITaC Project 1c (Currency Derivatives).

All instrument types included in this table below will be effective and valid from the go-live of ITaC. i.e. they will be catered for in the ITaC functionality however may not all have an existing listing in the production environment on go-live, but can be introduced shortly thereafter.

The client instrument reference data csv files contain at least one record of every instrument type below except for user-created instruments as these are not generated by the JSE.

6.1.1 Equity Derivative Instrument Types

<u>Underlying Type</u>	<u>Derivatives Tradable Instrument type</u>	<u>User Created Instrument Only i.e. cannot be generated by JSE</u>	<u>Client Reference data (csv) file to source the data</u>
JSE Listed Equity	Single Stock Future		Instruments Future
JSE Listed Equity	Single Stock Option		Instruments Option
JSE Listed Equity	Single Stock AnyDay Future		Instruments Future
JSE Listed Equity	Single Stock AnyDay Option		Instruments Option
JSE Listed Equity	Single Stock Dividend Neutral Future		Instruments Future
JSE Listed Equity	Single Stock Dividend Neutral AnyDay Future		Instruments Future
JSE Listed Equity	CFD		Instruments Future
JSE Index	Index Future		Instruments Future
JSE Index	Index Option		Instruments Option
JSE Index	Index AnyDay Future		Instruments Future
JSE Index	Index AnyDay Option		Instruments Option
International Equity	International Equity Future		Instruments Future
International Equity	International Equity AnyDay Future		Instruments Future
International Equity	International Equity Dividend Neutral Future		Instruments Future
International Equity	International Equity Dividend Neutral AnyDay Future		Instruments Future
International Equity	International Equity Quanto Future		Instruments Future
International Equity	International Equity Quanto Option		Instruments Option
International Equity	International Equity Quanto Dividend Neutral Future		Instruments Future
International Index	International Index Future		Instruments Future
International Index	International Index Option		Instruments Option

<u>Underlying Type</u>	<u>Derivatives Tradable Instrument type</u>	<u>User Created Instrument Only i.e. cannot be generated by JSE</u>	<u>Client Reference data (csv) file to source the data</u>
International Index	International Index AnyDay Future		Instruments Future
International Index	International Index AnyDay Option		Instruments Option
International Index	International Index Quanto Future		Instruments Future
International Index	International Index Quanto Option		Instruments Option
JSE Listed Equity	Single Stock Inverse Calendar Spread		Instruments Inverse Calendar Spread
JSE Listed Equity	Single Stock Dividend Neutral Inverse Calendar Spread		Instruments Inverse Calendar Spread
JSE Listed Equity	Single Stock Delta Option	Yes	Instruments Call Delta Option OR Instruments Put Delta Option
JSE Listed Equity	Single Stock Anyday Delta Option	Yes	Instruments Call Delta Option OR Instruments Put Delta Option
JSE Index	Index Inverse Calendar Spread		Instruments Inverse Calendar Spread
JSE Index	Index Delta Option	Yes	Instruments Call Delta Option OR Instruments Put Delta Option
JSE Index	Index Anyday Delta Option	Yes	Instruments Call Delta Option OR Instruments Put Delta Option
International Equity	International Equity Inverse Calendar Spread		Instruments Inverse Calendar Spread
International Equity	International Equity Dividend Neutral		Instruments Inverse Calendar Spread

<u>Underlying Type</u>	<u>Derivatives Tradable Instrument type</u>	<u>User Created Instrument Only i.e. cannot be generated by JSE</u>	<u>Client Reference data (csv) file to source the data</u>
	Inverse Calendar Spread		
International Equity	International Equity Quanto Delta Option	Yes	Instruments Call Delta Option OR Instruments Put Delta Option
International Index	International Index Inverse Calendar Spread		Instruments Inverse Calendar Spread
International Index	International Index Delta Option	Yes	Instruments Call Delta Option OR Instruments Put Delta Option
International Index	International Index Anyday Delta Option	Yes	Instruments Call Delta Option OR Instruments Put Delta Option
International Index	International Index Quanto Delta Option	Yes	Instruments Call Delta Option OR Instruments Put Delta Option
Basket	Basket Future		Instruments Future
Basket	Option on Basket Future		Instruments Option
Basket	Exotic Future		Instruments Future
Basket	Exotic Option		Instruments Future
JSE Equity	Exotic Option		Instruments Future
JSE Index	Exotic Option		Instruments Future
International Index	Exotic Option		Instruments Future
International Equity	Exotic Option		Instruments Future
Basket (created as a result of an Unbundling or Partial Conversion)	Single Stock Future		Instruments Future
Basket (created as a	Single Stock Dividend		Instruments Future

<u>Underlying Type</u>	<u>Derivatives Tradable Instrument type</u>	<u>User Created Instrument Only i.e. cannot be generated by JSE</u>	<u>Client Reference data (csv) file to source the data</u>
result of an Unbundling or Partial Conversion)	Neutral Future		
Basket (created as a result of a an Unbundling or Partial Conversion)	Single Stock AnyDay Future		Instruments Future
Basket (created as a result of an Unbundling or Partial Conversion)	Single Stock AnyDay Option		Instruments Option
Basket (created as a result of an Unbundling or Partial Conversion)	Single Stock Option		Instruments Option
Basket (created as a result of an Unbundling or Partial Conversion)	Single Stock Dividend Neutral AnyDay Future		Instruments Future
Basket (created as a result of an Unbundling or Partial Conversion)	Single Stock AnyDay Future		Instruments Future
Basket (created as a result of an Unbundling or Partial Conversion)	Single Stock Inverse Calendar Spread		Instruments Inverse Calendar Spread
Basket (created as a result of an Unbundling or Partial Conversion)	Single Stock Dividend Neutral Inverse Calendar Spread		Instruments Inverse Calendar Spread
Basket (created as a result of an Unbundling or Partial Conversion)	Single Stock Delta Option	Yes	Instruments Call Delta Option OR Instruments Put Delta Option
Basket (created as a result of an Unbundling or Partial Conversion)	Single Stock Anyday Delta Option	Yes	Instruments Call Delta Option OR Instruments Put Delta Option
Basket (created as a result of an Unbundling or Partial Conversion)	International Equity Future		Instruments Future
Basket (created as a result of an Unbundling or Partial Conversion)	International Equity AnyDay Future		Instruments Future

<u>Underlying Type</u>	<u>Derivatives Tradable Instrument type</u>	<u>User Created Instrument Only i.e. cannot be generated by JSE</u>	<u>Client Reference data (csv) file to source the data</u>
Basket (created as a result of an Unbundling or Partial Conversion)	International Equity Dividend Neutral Future		Instruments Future
Basket (created as a result of an Unbundling or Partial Conversion)	International Equity Dividend Neutral AnyDay Future		Instruments Future
Basket (created as a result of an Unbundling or Partial Conversion)	International Equity Quanto Dividend Neutral Future		Instruments Future
Basket (created as a result of an Unbundling or Partial Conversion)	International Equity Quanto Future		Instruments Future
Basket (created as a result of an Unbundling or Partial Conversion)	International Equity Quanto Option		Instruments Option
Basket (created as a result of an Unbundling or Partial Conversion)	International Equity Inverse Calendar Spread		Instruments Inverse Calendar Spread
Basket (created as a result of an Unbundling or Partial Conversion)	International Equity Dividend Neutral Inverse Calendar Spread	Yes	Instruments Call Delta Option OR Instruments Put Delta Option
Basket (created as a result of an Unbundling or Partial Conversion)	International Equity Quanto Delta Option	Yes	Instruments Call Delta Option OR Instruments Put Delta Option

6.1.2 Currency Derivative Instrument Types

<u>Underlying Type</u>	<u>Tradable Instrument type</u>	<u>User Created Instrument Only i.e. cannot be generated by JSE</u>	<u>Client Reference data (csv) file to source the data</u>
Forex Pair	Forex Future		Instruments Future
Forex Pair	Forex Option		Instruments Option
Forex Pair	Forex AnyDay Future		Instruments Future
Forex Pair	Forex AnyDay Option		Instruments Option
Forex Pair	Quanto Forex Future		Instruments Future
Forex Pair	Quanto Forex Option		Instruments Option
Forex Pair	Quanto Forex AnyDay Future		Instruments Future
Forex Pair	Quanto Forex AnyDay Option		Instruments Option
Forex Pair	Inverted Currency Future		Instruments Future
Forex Pair	Inverted Currency Option		Instruments Option
Forex Pair	FWDFWDFX Future		Instruments FWDFWD
Forex Index	Forex Index Future		Instruments Future
Forex Pair	Exotic Option		Instruments Future
Forex Pair	Inverse Calendar Spread on Forex Futures		Instruments Inverse Calendar Spread
Forex Pair	Delta Option on Forex Futures and Options	Yes	Instruments Call Delta Option OR Instruments Put Delta Option

6.2 Contract Codes per Instrument Type

The below table will show all the variations of Contract Codes for each Instrument Type described in section 6.1. Please note that for each instrument type only one underlying instrument is shown in the example, e.g. AGL for Single Stocks, ALSI for Index derivatives. This value will be different for each individual underlying instrument.

Please also note that MINI or MAXI contracts will only be applicable to Instrument types where the Underlying Type is JSE Index or Forex Pair as indicated below, and it will not apply to Anydays.

For derivatives with a JSE Index as the underlying instrument, the old Safex code will be used to indicate the underlying, instead of the underlying itself. For example, the contract code will show ALMI and not ALSI for the ALSI Mini contracts, even though the ALSI is the actual underlying instrument. This is to avoid duplication in scenarios where the same underlying is used for a different type of product e.g. the standard ALSI and the ALSI TRI. This will not impact the structure of the Contract code; only the content of the 'Underlying' portion will be different.

6.2.1 Equity Derivative Instrument Types

Underlying Type	Derivatives Tradable Instrument Types	Example Contract Codes	Instrument Type Code
JSE Listed Equity	Single Stock Future	15DEC17 AGL PHY	SSF1
JSE Listed Equity	Single Stock Option	15DEC17 AGL PHY 23.99C	SSO1
JSE Listed Equity	Single Stock AnyDay Future	01DEC17 AGL PHY ANY	SSAF1
JSE Listed Equity	Single Stock AnyDay Option	01DEC17 AGL PHY ANY 23.99C	SSAO1
JSE Listed Equity	Single Stock Dividend Neutral Future	15DEC17 AGL PHY DN	SSDN1
JSE Listed Equity	Single Stock Dividend Neutral AnyDay Future	01DEC17 AGL PHY ANY DN	SSDN3
JSE Listed Equity	CFD	15MAR18 AGL CSH CFD SAFEY	CFD
JSE Index	Index Future	15DEC17 ALSI	IF
		15DEC17 ALMI MINI	
JSE Index	Index Option	15DEC17 ALSI 23.99P	IO
		15DEC17 ALMI MINI 23.99P	
JSE Index	Index AnyDay Future	01DEC17 ALSX ANY	IAF
JSE Index	Index AnyDay Option	01DEC17 ALSX ANY 23.99P	IAO
International Equity	International Equity Future	15DEC17 GOOGL CSH	IEF1

Underlying Type	Derivatives Tradable Instrument Types	Example Contract Codes	Instrument Type Code
International Equity	International Equity AnyDay Future	01DEC17 GOOGL CSH ANY	IEAF1
International Equity	International Equity Dividend Neutral Future	15DEC17 GOOGL CSH DN	IEDN1
International Equity	International Equity Dividend Neutral AnyDay Future	01DEC17 GOOGL CSH ANY DN	IEDN3
International Equity	International Equity Quanto Future	01DEC17 GOOGLQ CSH QUANTO *Note - For Quantos the underlying code will be suffixed with a 'Q'	IEQF1
International Equity	International Equity Quanto Option	01DEC17 GOOGLQ CSH QUANTO 23.99C *Note - For Quantos the underlying code will be suffixed with a 'Q'	IEQ1
International Equity	International Equity Quanto Dividend Neutral Future	01DEC17 GOOGL CSH DN QUA *Note - For Quantos the underlying code will be suffixed with a 'Q'	IEQD1
International Index	International Index Future	15DEC17 GDOW 10	IIF
International Index	International Index Option	15DEC17 GDOW 10 23.99C	IIO
International Index	International Index AnyDay Future	01DEC17 GDOW ANY 10	IIAF
International Index	International Index AnyDay Option	01DEC17 GDOW ANY 10 23.99C	IIAO
International Index	International Index Quanto Future	01DEC17 GDOWQ QUANTO 10 *Note - For Quantos the underlying code will be suffixed with a 'Q'	IIQF

Underlying Type	Derivatives Tradable Instrument Types	Example Contract Codes	Instrument Type Code
International Index	International Index Quanto Option	01DEC17 GDOWQ QUANTO 10 23.99C *Note - For Quantos the underlying code will be suffixed with a 'Q'	IIQO
JSE Listed Equity	Single Stock Inverse Calendar Spread	15DEC17/15MAR18 AGL CSH	ICS1
JSE Listed Equity	Single Stock Dividend Neutral Inverse Calendar Spread	15DEC17/15MAR18 AGL CSH DN	ICS2
JSE Listed Equity	Single Stock Delta Option	15DEC17 AGL PHY DEL 3.97P	DO1
JSE Listed Equity	Single Stock Anyday Delta Option	15DEC17 AGL PHY ANY DEL 18.9P	DO2
JSE Index	Index Inverse Calendar Spread	15DEC17/15MAR18 ALSI CSH	ICS3
		15DEC17/15MAR18 ALSI CSH MINI	
JSE Index	Index Delta Option	15MAR18 ALSI CSH DEL 46183P	DO5
		15MAR18 ALSI CSH DEL MINI 46183P	
JSE Index	Index Anyday Delta Option	30JUN17 ALSI CSH ANY DEL 156C	DO6
International Equity	International Equity Inverse Calendar Spread	15DEC17/15MAR18 GOOGL CSH	ICS5
International Equity	International Equity Dividend Neutral Inverse Calendar Spread	15DEC17/15MAR18 GOOGL CSH DN	ICS6
International Equity	International Equity Quanto Delta Option	30JUN17 GOOGLQ CSH QUANTO DEL 25.57P	DO12
International Index	International Index Inverse Calendar Spread	15DEC17/15MAR18 GDOW CSH	ICS9
International Index	International Index Delta Option	15DEC17 GDOW CSH DEL 23.99P	DO14
International Index	International Index Anyday Delta Option	30JUN17 GDOW CSH ANY DEL 156.35C	DO15
International Index	International Index Quanto Delta Option	30JUN17 GDOWQ CSH QUANTO DEL	DO18

Underlying Type	Derivatives Tradable Instrument Types	Example Contract Codes	Instrument Type Code
		1599.37P	
Basket	Basket Future	15DEC17 BSK001 CSH BSF_196	BFF1
Basket	Option on Basket Future	15DEC17 BSK001 CSH 23.999C	BFO1
Basket	Delta Option on Basket Future	15DEC17 BSK001 CSH DEL 23.999C	BSKDO1
Basket	Exotic Future	17DEC15 BSK001 CSH EXF_195	EFF1
Basket	Exotic Option	15DEC17 BSK001 CSH EXO_195	EOF1B2
JSE Equity	Exotic Option	15DEC17 AGL CSH EXO_195	EOF2
JSE Index	Exotic Option	17DEC15 ALSI CSH EXO_195	EOF3
International Index	Exotic Option	17DEC15 GDOW CSH EXO_195	EOF5
International Equity	Exotic Option	17DEC15 GOOGLI CSH EXO_195	EOE4 IEEO1
Basket (created as a result of a Unbundling / Partial Conversion)	Single Stock Future	15DEC17 BSK002 PHY	SSF2
Basket (created as a result of a Unbundling / Partial Conversion)	Single Stock Dividend Neutral Future	15DEC17 BSK002 PHY DN	SSDN5
Basket (created as a result of a Unbundling / Partial Conversion)	Single Stock AnyDay Future	01DEC17 BSK002 PHY ANY	SSAF2
Basket (created as a result of a Unbundling / Partial Conversion)	Single Stock AnyDay Option	01DEC17 BSK002 PHY ANY 23.99C	SSAO2
Basket (created as a result of a Unbundling / Partial Conversion)	Single Stock Option	15DEC17 AGL PHY 23.99C	SSO2

Underlying Type	Derivatives Tradable Instrument Types	Example Contract Codes	Instrument Type Code
Basket (created as a result of a Unbundling / Partial Conversion)	Single Stock Dividend Neutral AnyDay Future	01DEC17 AGL PHY ANY DN	SSDN7
W	Single Stock AnyDay Future	15DEC17 AGL PHY DN	
Basket (created as a result of a Unbundling / Partial Conversion)	Single Stock Inverse Calendar Spread	15DEC17/15MAR18 BSK002 CSH	ICS20
Basket (created as a result of a Unbundling / Partial Conversion)	Single Stock Dividend Neutral Inverse Calendar Spread	15DEC17/15MAR18 BSK002 CSH DN	ICS21
Basket (created as a result of a Unbundling / Partial Conversion)	Single Stock Delta Option	15DEC17 BSK002 PHY DEL 3.97P	SSDO2
Basket (created as a result of a Unbundling / Partial Conversion)	Single Stock Anyday Delta Option	15DEC17 BSK002 PHY ANY DEL 18.9P	SSADO2
Basket (created as a result of a Unbundling / Partial Conversion)	International Equity Future	15DEC17 BSK003 CSH	IEF2
Basket (created as a result of a Unbundling / Partial Conversion)	International Equity AnyDay Future	01DEC17 BSK002 CSH ANY	IEAF2
Basket (created as a result of a Unbundling / Partial Conversion)	International Equity Dividend Neutral Future	15DEC17 BSK003 CSH DN	IEDN5
Basket (created as a result of a Unbundling / Partial Conversion)	International Equity Dividend Neutral AnyDay Future	01DEC17 BSK003 CSH ANY DN	IEDN7
Basket (created as a result of a Unbundling / Partial Conversion)	International Equity Quanto Dividend Neutral Future	01DEC17 BSK003 CSH DN QUA	IEQD3

Underlying Type	Derivatives Tradable Instrument Types	Example Contract Codes	Instrument Type Code
Unbundling / Partial Conversion)			
Basket (created as a result of a Unbundling / Partial Conversion)	International Equity Quanto Future	01DEC17 BSK003 CSH QUANTO	IEQF2
Basket (created as a result of a Unbundling / Partial Conversion)	International Equity Quanto Option	01DEC17 BSK003 CSH QUANTO 23.99C	IEQ2
Basket (created as a result of a Unbundling / Partial Conversion)	International Equity Inverse Calendar Spread	15DEC17/15MAR18 BSK003 CSH	ICS18
Basket (created as a result of a Unbundling / Partial Conversion)	International Equity Dividend Neutral Inverse Calendar Spread	15DEC17/15MAR18 BSK003 CSH DN	ICS19
Basket (created as a result of a Unbundling / Partial Conversion)	International Equity Quanto Delta Option	30JUN17 BSK003 CSH QUANTO DEL 25.57P	IQEDO2

6.2.2 Currency Derivative Instrument Types

<u>Underlying Type</u>	<u>Derivatives Tradable Instrument type</u>	<u>Example Contract Codes</u>	<u>Instrument Type Code</u>
Forex Pair	Forex Future	15DEC17 EURZAR	FF1
		15DEC17 EURZAR MAXI	
Forex Pair	Forex Option	15DEC17 EURZAR 14725.36P	FO
		15DEC17 EURZAR MAXI 14725.36P	
Forex Pair	Forex AnyDay Future	31MAY17 EURZAR ANYDAY	FAF
Forex Pair	Forex AnyDay Option	31MAY17 EURZAR ANYDAY 14725.36P	FAO
Forex Pair	Quanto Forex Future	15DEC17 EURUSD QUANTO	QFF
		15DEC17 EURUSD QUANTO MAXI	
Forex Pair	Quanto Forex Option	15DEC17 EURUSD QUANTO 149.36P	QFO
		15DEC17 EURUSD QUANTO MAXI 149.36P	
Forex Pair	Quanto Forex AnyDay Future	31MAY17 EURUSD ANYDAY QUANTO	QFAF
Forex Pair	Quanto Forex AnyDay Option	31MAY17 EURUSD ANYDAY QUANTO 149.36P	QFAO
Forex Pair	Inverted Currency Future	18SEP17 ZARJPY	ICF
		18SEP17 ZARJPY MAXI	
Forex Pair	Inverted Currency Option	18SEP17 ZARJPY 0.1429C	ICO
		18SEP17 ZARJPY MAXI 0.1429C	
Forex Pair	FWDFWDFX Future	28JUL17/30OCT17 USDZAR 3X6	FF2
Forex Index	Forex Index Future	15DEC17 RAIN	FIF
Forex Pair	Exotic Option	30JUN17 USDZAR CSH EXO_ZAU1	EOF20
Forex Pair	Forex Inverse Calendar Spread	15DEC17/15MAR18	ICS13

		GBPZAR	
		15DEC17/15MAR18 GBPZAR MAXI	
Forex Index	Forex Index Inverse Calendar Spread	15DEC17/15MAR18 RAIN	ICS16
Forex Pair	Quanto Forex Inverse Calendar Spread	15DEC17/15MAR18 EURUSD QUANTO	ICS14
		15DEC17/15MAR18 EURUSD QUANTO MAXI	
Forex Pair	Inverted Currency Inverse Calendar Spread	15DEC17/15MAR18 ZARJPY	ICS15
		15DEC17/15MAR18 ZARJPY MAXI	
Forex Pair	Forex Delta Option	15DEC17 USDZAR DEL 154.35P	DO20
		15DEC17 USDZAR DEL MAXI 154.35P	
Forex Pair	Forex Anyday Delta Option	30MAY17 USDZAR ANYDAY DEL 0.0001P	DO21
Forex Pair	Inverted Currency Delta Option	18SEP17 ZARJPY DEL 154.68P	DO24
		18SEP17 ZARJPY DEL MAXI 154.68P	
Forex Pair	Quanto Forex Delta Option	15DEC17 EURUSD QUANTO DEL 149.36P	DO22
		15DEC17 EURUSD QUANTO DEL MAXI 149.36P	
Forex Pair	Quanto Forex AnyDay Delta Option	31MAY17 EURUSD ANYDAY QUANTO DEL 149.36P	DO23

6.3 Old to New Instrument Types mapping

The below table describes how the existing instrument types will be converted into the ITaC system, and how those types will be loaded in the future.

Nuclears Instrument type	MDS Instrument Type
Equity Derivative Instruments	
Single Stock	
Future on Instrument Type Code=SSF	Single Stock Future
Option on Instrument Type Code=SSF	Single Stock Option
Calendar Spread on Instrument Type Code=SSF	Single Stock Inverse Calendar Spread
Delta Option on Instrument Type Code=SSF	Single Stock Delta Option
Future on Instrument Type Code=Divneut** Dividend Future on Instrument Type Code=DIVF**	Replaced by Single Stock Dividend Neutral Future
Calendar Spread on Instrument Type Code=Divneut	Replaced by Single Stock Dividend Neutral Inverse Calendar Spread
Calendar Spread on Instrument Type Code=DIVF	
Future on Instrument Type Code=CANDO	Single Stock Anyday Future
Option on Instrument Type Code=CANDO	Single Stock Anyday Option
Delta Option on Instrument Type Code=CANDO	Single Stock Anyday Delta Option
Not existing in Nuclears	Single Stock Dividend Neutral Anyday Future
Index	
Future on Instrument Type Code=INDEX	Index Future
Option on Instrument Type Code=INDEX	Index Option
Calendar Spread on Instrument Type Code=INDEX	Index Inverse Calendar Spread
Delta Option on Instrument Type Code=INDEX	Index Delta Option
Future on Instrument Type Code=CANDO	Index Anyday Future
Option on Instrument Type Code=CANDO	Index Anyday Option
Delta Option on Instrument Type Code=CANDO	Index Anyday Delta Option
International Equity	

Nuclears Instrument type	MDS Instrument Type
Future on Instrument Type Code=IDXFUT	International Equity Future
Calendar Spread on Instrument Type Code=IDXFUT	International Equity Inverse Calendar Spread
Not Existing	International Equity Anyday Future
Dividend Future on Instrument Type Code=IDXDIV*	Replaced by International Equity Dividend Neutral Future
Dividend Future Calendar Spread on Instrument Type Code=IDXDIV*	Replaced by International Equity Dividend Neutral Inverse Calendar Spread
Not Existing	International Equity Dividend Neutral Anyday Future
Future on Instrument Type Code=CANDO	International Equity Quanto Future
Option on Instrument Type Code=CANDO	International Equity Quanto Option
Delta Option on Instrument Type Code=CANDO	International Equity Quanto Delta Option
Not Existing	International Equity Quanto Dividend Neutral Future
International Index	
Future on Instrument Type Code=CANDO	International Index Future
Option on Instrument Type Code=CANDO	International Index Option
Calendar Spread on Instrument Type Code=CANDO	International Index Inverse Calendar Spread
Delta Option on Instrument Type Code=CANDO	International Index Delta Option
Not Existing	International Index Anyday Future
Not Existing	International Index Anyday Option
Not Existing	International Index Anyday Delta Option
Not Existing	International Index Quanto Future
Not Existing	International Index Quanto Option
Not Existing	International Index Quanto Delta Option
CFD	
Future on Instrument Type Code=ECFD	CFD
Structure Products	
Future on Instrument Type Code=CANDO	Basket Future
Option on Instrument Type Code=CANDO	Option on Basket Future
Future on Instrument Type Code=CANDO	Exotic Future
Option on Instrument Type Code=CANDO	Exotic Option

Nuclears Instrument type	MDS Instrument Type
Currency Derivative Instruments	
Forex	
Future on Instrument Type Code=FOREX	Forex Future
Option on Instrument Type Code=FOREX	Forex Option
Calendar Spread on Instrument Type Code=FOREX	Forex Inverse Calendar Spread
Delta Option on Instrument Type Code=FOREX	Forex Delta Option
Future on Instrument Type Code=ANYDAY	Forex Anyday Future
Option on Instrument Type Code=ANYDAY	Forex Anyday Option
Delta Option on Instrument Type Code=ANYDAY	Forex Anyday Delta Option
Forex Index	
Not existing	Forex Index Future
Not existing	Forex Index Inverse Calendar Spread
Quanto	
Future on Instrument Type Code=FOREX	Quanto Forex Future
Option on Instrument Type Code=FOREX	Quanto Forex Option
Calendar Spread on Instrument Type Code=FOREX	Quanto Forex Inverse Calendar Spread
Not existing	Quanto Forex Anyday Future
Not existing	Quanto Forex Anyday Option
Inverted Currency	
Future on Instrument Type Code=FOREX	Inverted Currency Future
Option on Instrument Type Code=FOREX	Inverted Currency Option
Calendar Spread on Instrument Type Code=FOREX	Inverted Currency Inverse Calendar Spread
Delta Option on Instrument Type Code=FOREX	Inverted Currency Delta Option
Structure Products	
Future on Instrument Type Code=CANDO	Exotic Option

* The IDXDIV instrument type in Nutron is NOT a direct mapping to the International Equity Dividend Neutral in MDS. However, as part of ITAC, a decision was taken to discontinue Dividend Futures on all the existing instrument types. The Dividend Neutral instrument type was introduced in ITAC to move all positions from the IDXDIV and IDXDIV to the Dividend Neutrals. Hence the above mapping has been shown to indicate this movement of positions.

**The same rules apply for SSF and DIVF instrument types. The DIVF instrument type in Nutron is not a direct mapping to the Single Stock Dividend Neutral. However, as part of ITAC, a decision was taken to discontinue Dividend Futures on all

the existing instrument types. The Dividend Neutral instrument type was introduced in ITAC to move all positions from the SSF and DIVF to the Dividend Neutrals. Hence the above mapping has been shown to indicate this movement of positions

Please note: The exact rules regarding Position take-on have been defined in a separate document and is out of scope for the purpose of this document.

6.4 Index Futures with Different Strike Intervals

There was a need to align the Strike interval of the Standard index derivatives to the Anyday index derivatives, so that the only difference is the expiry date. After consultation with the market a decision was made to make the following changes:

1. Change the Strike Interval of ALSX from 0.01 to 50
2. Change the Strike Interval of DTOX from 0.01 to 10
3. Change the Strike Interval of DCAX from 0.01 to 10

6.5 CFDs with Different Base Rates

In Nutron, the Base rate – Safex Rand Overnight Deposit Rate (SAFEY/RODI) OR SARB Call Rate (SABOR) was selected for an e-CFD at the time of submitting a trade. There were no two different CFD instruments loaded with the different Base rates.

However, the new Clearing System requires the Base Rate as part of the reference data of an instrument, and not part of the transactional data. Therefore, with ITAC, there will be two CFDs loaded with different Base Rates for RODI and SABOR. This means that for each CFD on a JSE Equity, there will be a CFD with RODI Base rate and a CFD with SABOR Base rate.

The expiries linked to these 2 CFDs will be different with different Contract Codes and Universal IDs .

The Nutron eCFD expiries will be mapped to the CFD with RODI base rate expiries in the new reference data system.

See example below:

Nutron Short Name	Expiry Date	ITAC Contract Code	ITAC Universal ID	CFD Type
AGLC	20/03/2019	20MAR19 AGL CSH CFD RODI	1015543	CFD with RODI Base rate
N/A	20/03-2019	20MAR19 AGL CSH CFD SABOR	1015569	CFD with SABOR Base rate