

Derivatives Service Bureau
DSB UAT Product Definitions
Annex 5 – Commodities
August 2017

## Contents

Prefa	ace	3
Ch	ange History	3
	Introduction	
2	CFI Enumerations	5
2.1	1 Commodities Swaps	5
2.2	2 Commodities Options	5
2.3	3 Commodities Forwards	6
3	Product Definitions	7
3.2	1 Instrument Matrix	7
3.2	2 Swap Product Definition	8
3.3	Basis_Swap Product Definition	9
3.4	4 Multi_Exotic_Swap Product Definition	10
3.5	5 Option Product Definition	11
3.6	6 Multi_Exotic_Option Product Definition	12
3.7	7 Swaption Product Definition	13
3.8	8 Forward Product Definition	14
3 (	9 Multi Exotic Forward Product Definition	15

# Preface

### Change History

Date	Change	Version	Author	Revision Details
13/04/2017	Creation	0.1	Tony Birrell	Initial Version
24/04/2017	Change	0.2	Tony Birrell	Amend Use_Case name
28/04/2017	Change	0.3	Tony Birrell	Added Swaption definition
12/06/2017	Change	0.4	Tony Birrell	Added further product definitions for UAT and amended existing definitions to include Reference rate
23/06/2017	Change	0.4	Tony Birrell	Remove "Provisional" from title page and updated Short Names & Long names
31/07/2017	Change	0.5	Tony Birrell	Amend CFI references to refer to taxonomy
				Add the reference column to each Product Definition
				Capture changes implemented in the Aug change window

© DSB Product Committee 2017

#### 1 Introduction

The Product Definitions have been classified into three distinct sections:

- Product Definition Selection: The set of fields to define the full population of product specific attributes
- Product Definition Input: The set of attributes the user must input when requesting an ISIN
- Product Definition Defaulted Input: The set of attributes that contain defaulted values which are valid for ISIN creation however the user can engage and select a different value if required
- Product Definition Derived: The set of attributes that can be inferred by the combination of Product Definition Selection & Product Definition Input and will be returned to the user as part of the full ISIN record

The combination of the above 3 sections comprise the full record of the ISIN Engine that will be returned to the requester.

The sections are differentiated by colour:

Product Definition Selection	
Product Definition Input	
Product Definition Defaulted Input	
Product Definition Derived	

The Product Definition Derived & Input sections contain example values for illustrative purposes from SG2 Products. For a full list of possible enumerations please refer to the Enumerations table in the UAT Provisional Product Definitions document.

For the marked user input CFI related fields, please refer to the CFI enumerations table in section 2 for all possible enumerations.

## 2 CFI Enumerations

Source: ISO 10962 (CFI Code) - Third edition 2015-07-15

## 2.1 Commodities Swaps

Cl	nar Category	Char Group	Char	Att#1	Char A	Att#2	Char.	Att#3	Char	Att#4
Category		Group	Underlying asset		Return or payout trigger		Not Used		Delivery	
•	<b>S</b> Swaps	T Commodities	J K A N G P T S I Q M	Energy Metals Agriculture Environmental Freight Polypropylene Products Paper Fertilizer Index Multi Commodity Other	C T	Contract for Difference (CFD) Total Return	X	NA	C P E	Cash Physical Elect at Settlement

## 2.2 Commodities Options

Char Category	Char Group	Char Att#1	Char Att#2	CharAtt#3	Char Att#4
Category	Group	Underlying asset	Option Style and Type	Valuation Method or Trigger	Delivery
H Nonlisted and Complex Listed Options	T Commodities	J Energy K Metals A Agriculture N Environmental G Freight P Polypropylene Products T Paper S Fertilizer I Index Q Multi Commodity O Options R Forwards F Futures W Swap M Other	A European-Call B American-Call C Bermudan-Call D European-Put E American-Put F Bermudan-Put G European-Chooser H American-Chooser I Bermudan-Chooser	V Vanilla A Asian D Digital (Binary) B Barrier G Digital Barrier L Lookback P Other Path Dependent M Other	C Cash P Physical E Elect at Exercise

### 2.3 Commodities Forwards

Char	Category	Char Group	Char Att#1	Char Att#2	CharAtt#3	Char Att#4
Category		Group	Underlying asset	Unused	Return or payout trigger	Delivery
J	Forwards	T Commodities	J Energy K Metals A Agriculture N Environmental G Freight P Polypropylene Products T Paper S Fertilizer I Index B Basket M Other	X NA	C Contract for Difference (CFD)     F Forward price of underlying instrument	C Cash P Physical

© DSB Product Committee 2017

### 3 Product Definitions

#### 3.1 Instrument Matrix

The below is based on the products identified as part of the ISDA 2.0 taxonomy

The DSB has provided examples below of Swap, Forward, Option and Swaption products which are relevant for all Commodity Products listed within the ISO enumerations

#	Asset Class	Commodity	Sub-Commodity	Instrument type	DSB Product Definition Name
1	Commodity	Energy	NaturalGas	Swap	Swap
2	Commodity	Energy	NaturalGas	Swap	Basis_Swap
3	Commodity	Energy	NaturalGas	Swap	Multi_Exotic_Swap
4	Commodity	Energy	NaturalGas	Option	Option
5	Commodity	Energy	NaturalGas	Option	Multi_Exotic_Option
6	Commodity	Energy	NaturalGas	Swaption	Swaption
7	Commodity	Energy	NaturalGas	Forward	Forward
8	Commodity	Energy	NaturalGas	Forward	Multi_Exotic_Forward

## 3.2 Swap Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	ESMA Mapping	CFI Char
<b>D</b> 1 1	Asset Class	T - Commodities	CFI/2nd letter	Group
Product Definition	Instrument Type	S - Swap	CFI/1st letter	Category
Selection	Product	Swap		
Selection	Level	InstRefDataReporting		
	Notional Currency	GBP	RTS23/Field13	
	Expiry date	2017-12-31	RTS23/Field24	
	Return or Payout Trigger	C - Contract for Difference	CFI/4th Swaps/5th Fwds	Att#2
	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	Att#4
Product Definition	Base Product	NRGY	RTS23/Field35	
	Sub Product	NGAS	RTS23/Field36	
Input	Additional Sub Product	GASP	RTS23/Field37	
	Transaction Type	SWAP	RTS23/Field38	
	Final Price type	OTHR	RTS23/Field39	
	Reference Rate	NATURAL GAS-CHICAGO CITYGATES-DAY AHEAD-ICE		
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New		
	Status Reason			
	Last Update DateTime	2017-07-31T12:00:00		
	Version	1		
Dun di cat	Parent	<null></null>		
Product Definition	Identification	ISIN	RTS23/Field1	
Derived	Full Name	Commodities Swap NRGY NGAS GASP GBP 20171231	RTS23/Field2	
Deriveu	Classification Type	STJCXC	RTS23/Field3	
	Commodity Derivative Indicator	TRUE	RTS23/Field4	
	Issuer or operator of the trading venue identifier	NA	RTS23/Field5	
	Short Name	NA/Swap NRGY GASP GBP 20171231	RTS23/Field7	
	Underlying Asset type	J - Energy	CFI/3rd letter	Att#1

# 3.3 Basis\_Swap Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	ESMA Mapping	CFI Char
	Asset Class	T - Commodities	CFI/2nd letter	Group
Product	Instrument Type	S - Swap	CFI/1st letter	Category
Definition	Product	Basis_Swap		
Selection	Level	InstRefDataReporting		
	Notional Currency	GBP	RTS23/Field13	
	Expiry date	2017-12-31	RTS23/Field24	
	Return or Payout Trigger	C - Contract for Difference	CFI/4th Swaps/5th Fwds	Att#2
	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	Att#4
	Base Product	NRGY	RTS23/Field35	
	Sub Product	NGAS	RTS23/Field36	
Product	Additional Sub Product	GASP	RTS23/Field37	
Definition	Other Base Product	NRGY		
Input	Other Sub Product	NGAS		
	Other Additional Sub Product	NCGG		
	Transaction Type	SWAP	RTS23/Field38	
	Final Price type	OTHR	RTS23/Field39	
	Reference Rate	NATURAL GAS-CHICAGO CITYGATES-DAY AHEAD-ICE		
	Other Reference Rate	NATURAL GAS-NYMEX		
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New		
	Parent	<null></null>		
	Status Reason			
	Last Update DateTime	2017-07-31T12:00:00		
	Version	1		
Product	Identification	ISIN	RTS23/Field1	
Definition Derived	Full Name	Commodities Swap Basis_Swap NRGY NGAS GASP NRGY NGAS NCGG GBP 20171231	RTS23/Field2	
	Classification Type	STQCXC	RTS23/Field3	
	Commodity Derivative Indicator	TRUE	RTS23/Field4	
	Issuer or operator of the trading venue identifier	NA	RTS23/Field5	
	Short Name	NA/Swap NRGY GASP GBP 20171231	RTS23/Field7	
	Underlying Asset type	Q - Multi Commodity	CFI/3rd letter	Att#1

# 3.4 Multi\_Exotic\_Swap Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	ESMA Mapping	CFI Char
	Asset Class	T - Commodities	CFI/2nd letter	Group
Product Definition	Instrument Type	S - Swap	CFI/1st letter	Category
Selection	Product	Multi_Exotic_Swap		
Selection	Level	InstRefDataReporting		
	Notional Currency	GBP	RTS23/Field13	
	Expiry date	2017-12-31	RTS23/Field24	
	Underlying Instrument Index	BCOMCO, BCOMCO2 etc		
Product	Return or Payout Trigger	C - Contract for Difference	CFI/4th Swaps/5th Fwds	Att#2
Definition	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	<u>Att#4</u>
Input	Transaction Type	SWAP	RTS23/Field38	
	Final Price type	OTHR	RTS23/Field39	
	Reference Rate	OIL-BRENT/BFOE-ARGUS CRUDE, OIL-BRENT/BFOE-		
		PLATTS MARKETWIRE etc		
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New		
	Parent	<null></null>		
	Status Reason			
	Last Update DateTime	2017-07-31T12:00:00		
	Version	1		
	Identification	ISIN	RTS23/Field1	
Dun dunk	Full Name	Commodities Multi_Exotic_Swap MCEX GBP 20171231	RTS23/Field2	
Product Definition	Classification Type	STQCXC	RTS23/Field3	
Derived	Commodity Derivative Indicator	TRUE	RTS23/Field4	
Derived	Issuer or operator of the trading venue identifier	NA	RTS23/Field5	
	Short Name	NA/Swap MCEX GBP 20171231	RTS23/Field7	
	ISO Underlying Instrument Index	Multiple Indices	RTS23/Field28	
	Base Product	MCEX	RTS23/Field35	
	Sub Product	<null></null>	RTS23/Field36	
	Additional Sub Product	<null></null>	RTS23/Field37	
	Underlying Asset type	Q - Multi commodity	CFI/3rd letter	Att#1

## 3.5 Option Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	ESMA Mapping	CFI Char
Dundunt	Asset Class	T - Commodities	CFI/2nd letter	Group
Product	Instrument Type	H - Option	CFI/1st letter	Category
Definition Selection	Product	Option		
Selection	Level	InstRefDataReporting		
	Notional Currency	GBP	RTS23/Field13	
	Expiry date	2017-12-31	RTS23/Field24	
	Option type	Call	RTS23/Field30 / CFI 4th Opts	Att#2
	Option exercise style	American	RTS23/Field33 / CFI 4th Opts	<u>Att#2</u>
Dun alouat	Valuation Method or Trigger	V - Vanilla	CFI/5th Opts	Att#3
Product	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	Att#4
Definition	Base Product	NRGY	RTS23/Field35	
Input	Sub Product	NGAS	RTS23/Field36	
	Additional Sub Product	GASP	RTS23/Field37	
	Transaction Type	OPTN	RTS23/Field38	
	Final Price type	OTHR	RTS23/Field39	
	Reference Rate	NATURAL GAS-CHICAGO CITYGATES-DAY AHEAD-ICE		
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New		
	Status Reason			
	Last Update DateTime	2017-07-31T12:00:00		
	Version	1		
Dunalizat	Parent	<null></null>		
Product Definition	Identification	ISIN	RTS23/Field1	
Definition	Full Name	Commodities Option NRGY NGAS GASP GBP 20171231	RTS23/Field2	
Derived	Classification Type	HTJBVC	RTS23/Field3	
	Commodity Derivative Indicator	TRUE	RTS23/Field4	
	Issuer or operator of the trading venue identifier	NA	RTS23/Field5	
	Short Name	NA/O NRGY GASP Call GBP 20171231	RTS23/Field7	
	Underlying Asset type	J - Energy	CFI/3rd letter	Att#1

# 3.6 Multi\_Exotic\_Option Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	ESMA Mapping	CFI Char
5 1 1	Asset Class	T - Commodities	CFI/2nd letter	Group
Product Definition	Instrument Type	H - Option	CFI/1st letter	Category
	Product	Multi_Exotic_Option		
Selection	Level	InstRefDataReporting		
	Notional Currency	GBP	RTS23/Field13	
	Expiry date	2017-12-31	RTS23/Field24	
	Underlying Instrument Index	BCOMCO, BCOMCO2 etc	RTS23/Field28	
	Option type	Call	RTS23/Field30 / CFI 4th Opts	Att#2
Product	Option exercise style	American	RTS23/Field33 / CFI 4th Opts	Att#2
Definition	Valuation Method or Trigger	V - Vanilla	CFI/5th Opts	Att#3
Input	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	<u>Att#4</u>
	Transaction Type	OPTN	RTS23/Field38	
	Final Price type	OTHR	RTS23/Field39	
	Reference Rate	OIL-BRENT/BFOE-ARGUS CRUDE, OIL-BRENT/BFOE-PLATTS		
		MARKETWIRE etc		
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New		
	Status Reason			
	Last Update DateTime	2017-07-31T12:00:00		
	Version	1		
	Parent	<null></null>		
	Identification	ISIN	RTS23/Field1	
	Full Name	Commodities Multi_Exotic_Option MCEX GBP 20171231	RTS23/Field2	
	Classification Type	HTQBVC	RTS23/Field3	
	Commodity Derivative Indicator	TRUE	RTS23/Field4	
Derived	Issuer or operator of the trading venue identifier	NA	RTS23/Field5	
Selection  Le  No Ex  Ur  Op Product Definition Input  Defaulted Input  ISI Sta La Ve Pa Ide Product Definition Derived  Iss Sh Iso Ba Su Ad	Short Name	NA/O MCEX Call GBP 20171231	RTS23/Field7	
	ISO Underlying Instrument Index	Multiple Indices	RTS23/Field28	
	Base Product	MCEX	RTS23/Field35	
	Sub Product	<null></null>	RTS23/Field36	
	Additional Sub Product	<null></null>	RTS23/Field37	
	Underlying Asset type	Q - Multi commodity	CFI/3rd letter	Att#1

# 3.7 Swaption Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	ESMA Mapping	CFI Char
Product Definition Selection	Asset Class	T - Commodities	CFI/2nd letter	Group
	Instrument Type	H - Option	CFI/1st letter	Category
	Product	Swaption		
	Level	InstRefDataReporting		
	Notional Currency	GBP	RTS23/Field13	
Product Definition Input	Expiry date	2017-12-31	RTS23/Field24	
	Underlying instrument ISIN	EZ1122334455	RTS23/Field26	
	Underlying Asset type	J - Energy	CFI/3rd letter	Att#1
	Option type	Call	RTS23/Field30 / CFI 4th Opts	Att#2
	Option exercise style	American	RTS23/Field33 / CFI 4th Opts	<u>Att#2</u>
	Valuation Method or Trigger	V - Vanilla	CFI/5th Opts	<u>Att#3</u>
	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	<u>Att#4</u>
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New		
	Status Reason			
	Last Update DateTime	2017-07-31T12:00:00		
	Version	1		
Product	Parent	<null></null>		
Definition Derived	Identification	ISIN	RTS23/Field1	
	Full Name	Commodities Swaption EZ1122334455 GBP 20171231	RTS23/Field2	
	Classification Type	HTJBVC	RTS23/Field3	
	Commodity Derivative Indicator	TRUE	RTS23/Field4	
	Issuer or operator of the trading venue identifier	NA	RTS23/Field5	
	Short Name	NA/O Swt Call GBP 20171231	RTS23/Field7	

### 3.8 Forward Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	ESMA Mapping	CFI Char
Product Definition Selection	Asset Class	T - Commodities	CFI/2nd letter	Group
	Instrument Type	J - Forward	CFI/1st letter	Category
	Product	Forward		
	Level	InstRefDataReporting		
Product	Notional Currency	GBP	RTS23/Field13	
	Expiry date	2017-12-31	RTS23/Field24	
	Return or Payout Trigger	F - Forward price of underlying instrument	CFI/4th Swaps/5th Fwds	Att#3
	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	Att#4
	Base Product	NRGY	RTS23/Field35	
Definition Input	Sub Product	NGAS	RTS23/Field36	
πραι	Additional Sub Product	GASP	RTS23/Field37	
	Transaction Type	FUTR	RTS23/Field38	
	Final Price type	OTHR	RTS23/Field39	
	Reference Rate	NATURAL GAS-CHICAGO CITYGATES-DAY AHEAD-ICE		
Defaulted Input	Price Multiplier	1	RTS23/Field25	
Product Definition Derived	ISIN Status	New		
	Status Reason			
	Last Update DateTime	2017-07-31T12:00:00		
	Version	1		
	Parent	<null></null>		
	Identification	ISIN	RTS23/Field1	
	Full Name	Commodities Forward NRGY NGAS GASP GBP 20171231	RTS23/Field2	
	Classification Type	JTJXFC	RTS23/Field3	
	Commodity Derivative Indicator	TRUE	RTS23/Field4	
	Issuer or operator of the trading venue identifier	NA	RTS23/Field5	
	Short Name	NA/Fwd NRGY GASP GBP 20171231	RTS23/Field7	
	Underlying Asset type	J - Energy	CFI/3rd letter	Att#1

# 3.9 Multi\_Exotic\_Forward Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	ESMA Mapping	CFI Char
Product Definition	Asset Class	T - Commodities	CFI/2nd letter	Group
	Instrument Type	J - Forward	CFI/1st letter	Category
Selection	Product	Multi_Exotic_Forward		
Selection	Level	InstRefDataReporting		
	Notional Currency	GBP	RTS23/Field13	
	Expiry date	2017-12-31	RTS23/Field24	
	Underlying Instrument Index	BCOMCO, BCOMCO2 etc	RTS23/Field28	
Product	Return or Payout Trigger	F - Forward price of underlying instrument	CFI/4th Swaps/5th Fwds	Att#3
Definition	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	<u>Att#4</u>
Input	Transaction Type	FUTR	RTS23/Field38	
	Final Price type	OTHR	RTS23/Field39	
	Reference Rate	OIL-BRENT/BFOE-ARGUS CRUDE, OIL-BRENT/BFOE-PLATTS MARKETWIRE etc		
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New		
	Status Reason			
	Last Update DateTime	2017-07-31T12:00:00		
	Version	1		
	Parent	<null></null>		
	Identification	ISIN	RTS23/Field1	
Product	Full Name	Commodities Multi_Exotic_Forward MCEX GBP 20171231	RTS23/Field2	
Definition	Classification Type	JTMXFC	RTS23/Field3	
Derived	Commodity Derivative Indicator	TRUE	RTS23/Field4	
Derived	Issuer or operator of the trading venue identifier	NA	RTS23/Field5	
	Short Name	NA/Fwd MCEX GBP 20171231	RTS23/Field7	
	Underlying Instrument Index	Multiple Indices	RTS23/Field28	
	Base Product	MCEX	RTS23/Field35	
	Sub Product	<null></null>	RTS23/Field36	
	Additional Sub Product	<null></null>	RTS23/Field37	
	Underlying Asset type	M - Other	CFI/3rd letter	Att#1