

# Derivatives Service Bureau DSB UAT Product Definitions Annex 5 – Commodities August 2018

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## 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	
14/09/2017	Change	0.6	Tony Birrell	Added Taskforce Recommendations	
13/10/2017	Change	0.7	Tony Birrell	Added underlying instrument index prop	
22/11/2017	Change	0.8	Tony Birrell	Update definitions in PROD	
18/12/2017	Change	0.9	Tony Birrell	Updated Multi-exotics & included Basis	
27/08/2018	Change	0.10	Simon Wiltshire	Updated Multi-Exotic Swap, Option and Forward templates	

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#### 1 Introduction

The Product Definitions have been classified into four 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 4 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 DSB PROD 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

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

#### 3 Commodities Taskforce Recommendations

The following list of recommendations were agreed by the Commodities taskforce and should be considered as direction that the industry should follow to ensure consistent interpretation of the Product Definitions and associated attributes.

Attribute	Recommendation
Base Product	Where exact mapping does not exist use Base Product 'Other' and the specific Reference Rate to ensure a unique ISIN
Final Price Type	Select the corresponding Final Price Type if it matches to the Reference Rate selected
	If there are no corresponding values then 'Other' should be selected
	For basis instruments, following alphabetical normalisation, users should select the Final Price type that corresponds to
	the first leg Reference rate
Normalisation	Base Product and Other Base product should be normalised alphabetically
Notional Currency	Use settlement currency of the trade
Reference Rate	2015 Draft ISDA 2.0 Taxonomy to be used, optional field
	Select 'Other' where a specific value does not exist
Return or Payout Trigger	'Contract for Difference (CFD)' should be the default selection for Commodity Swaps
	'Forward Price of an Underlying Instrument' should be the default selection for Commodity Forwards
Transaction Type	No validation should be applied here, all RTS 23 values available
Underlying Instrument Index	Mandatory field

**Note to Users:** RTS 23 has defined the hierarchy of Base Product + Sub-Product + Additional Sub-Product that yield acceptable product combinations for creating a valid ISIN. Users must ensure that this hierarchy is followed.

## 4 Product Definitions

#### 4.1 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	Option	Swaption
7	Commodity	Energy	NaturalGas	Forward	Forward
8	Commodity	Energy	NaturalGas	Forward	Multi_Exotic_Forward

## 4.2 Swap Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	ESMA Mapping	CFI Char
Dundunk	Asset Class	T - Commodities	CFI/2nd letter	Group
Product Definition	Instrument Type	S - Swap	CFI/1st letter	Category
	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
5	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	Att#4
	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	DSB	
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New	DSB	
Product Definition Input	Status Reason		DSB	
	Last Update DateTime	2017-07-31T12:00:00	DSB	
	Version	1	DSB	
Dunalizat	Parent	<null></null>	DSB	
	Identification	ISIN	RTS23/Field1	
	Full Name	Commodities Swap NRGY NGAS GASP GBP 20171231	RTS23/Field2	
	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 <sup>1</sup>	RTS23/Field7	
	Underlying Asset type	J - Energy	CFI/3rd letter	Att#1

<sup>&</sup>lt;sup>1</sup> Preliminary value – format & content of FISN currently under review © DSB Product Committee 2018

# 4.3 Basis\_Swap Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	ESMA Mapping	CFI Char
D 1 1	Asset Class	T - Commodities	CFI/2nd letter	Group
Product Definition	Instrument Type	S - Swap	CFI/1st letter	Category
Selection	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	
Dun dun d	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	DSB	
	Parent	<null></null>	DSB	
	Status Reason		DSB	
	Last Update DateTime	2017-07-31T12:00:00	DSB	
	Version	1	DSB	
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

## 4.4 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	<u>Category</u>
Selection	Product	Multi_Exotic_Swap		
Selection	Level	InstRefDataReporting		
	Notional Currency	GBP	RTS23/Field13	
Product Definition Input	Expiry date	2017-12-31	RTS23/Field24	
	Base Product	eg: NRGY, MCEX	RTS23/Field35	
	Underlying Instrument Index	Optional : OTHER	RTS23/Field28	
Product	Underlying Instrument Index Prop	Optional (array)	DSB	
Definition	Return or Payout Trigger	C - Contract for Difference	CFI/4th Swaps/5th Fwds	Att#2
Input	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	Att#4
	Transaction Type	SWAP	RTS23/Field38	
	Final Price type	OTHR	RTS23/Field39	
	Reference Rate	Optional (array): OIL-BRENT/BFOE-ARGUS CRUDE, OIL-BRENT/BFOE-PLATTS MARKETWIRE etc	DSB	
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New	DSB	
	Parent	<null></null>	DSB	
	Status Reason		DSB	
	Last Update DateTime	2017-07-31T12:00:00	DSB	
	Version	1	DSB	
	Identification	ISIN	RTS23/Field1	
Product	Full Name	Commodities Multi_Exotic_Swap MCEX GBP 20171231	RTS23/Field2	
Definition	Classification Type	STQCXC	RTS23/Field3	
Derived	Commodity Derivative Indicator	TRUE	RTS23/Field4	
	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	
	Sub Product	<null></null>	RTS23/Field36	
	Additional Sub Product	<null></null>	RTS23/Field37	
	Underlying Asset type	Q - Multi commodity	CFI/3rd letter	Att#1

## 4.5 Option Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	ESMA Mapping	CFI Char
5 1 .	Asset Class	T - Commodities	CFI/2nd letter	Group
Product	Instrument Type	H - Option	CFI/1st letter	Category
Definition	Product	Option		
Selection	Level	InstRefDataReporting		
	Notional Currency	GBP	RTS23/Field13	
	Expiry date	2017-12-31	RTS23/Field24	
Product Definition	Option type	Call	RTS23/Field30 / CFI 4th Opts	Att#2
	Option exercise style	American	RTS23/Field33 / CFI 4th Opts	Att#2
	Valuation Method or Trigger	V - Vanilla	CFI/5th Opts	Att#3
	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	Att#4
	Base Product	NRGY	RTS23/Field35	
input	Sub Product	NGAS	RTS23/Field36	
Input	Additional Sub Product	GASP	RTS23/Field37	
	Transaction Type	OPTN	RTS23/Field38	
	Final Price type	OTHR	RTS23/Field39	
	Product	DSB		
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New	DSB	
	Status Reason		DSB	
	Last Update DateTime	2017-07-31T12:00:00	DSB	
	Version	1	DSB	
Dun dun d	Parent	<null></null>	DSB	
Product	Identification	ISIN	RTS23/Field1	
Definition Derived	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

## 4.6 Multi\_Exotic\_Option 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	Multi_Exotic_Option		
	Level	InstRefDataReporting		
	Notional Currency	GBP	RTS23/Field13	
	Expiry date	2017-12-31	RTS23/Field24	
	Base Product	eg: NRGY, MCEX	RTS23/Field35	
	Underlying Instrument Index	Optional : OTHER	RTS23/Field28	
	Underlying Instrument Index Prop	Optional (array)	DSB	
Product	Option type	Call	RTS23/Field30 / CFI 4th Opts	Att#2
Definition	Option exercise style	American	RTS23/Field33 / CFI 4th Opts	Att#2
Input	Valuation Method or Trigger	V - Vanilla	CFI/5th Opts	Att#3
	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	Att#4
	Transaction Type	OPTN	RTS23/Field38	
	Final Price type	OTHR	RTS23/Field39	
	Reference Rate	Optional (array): OIL-BRENT/BFOE-ARGUS CRUDE, OIL-	DSB	
		BRENT/BFOE-PLATTS MARKETWIRE etc		
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New	DSB	
	Status Reason		DSB	
	Last Update DateTime	2017-07-31T12:00:00	DSB	
	Version	1	DSB	
	Parent	<null></null>	DSB	
	Identification	ISIN	RTS23/Field1	
Product	Full Name	Commodities Multi_Exotic_Option MCEX GBP 20171231	RTS23/Field2	
Definition	Classification Type	HTQBVC	RTS23/Field3	
Derived	Commodity Derivative Indicator	TRUE	RTS23/Field4	
	Issuer or operator of the trading venue identifier	NA	RTS23/Field5	
	Short Name	NA/O MCEX Call GBP 20171231	RTS23/Field7	
	ISO Underlying Instrument Index	Multiple Indices	RTS23/Field28	
	Sub Product	<null></null>	RTS23/Field36	
	Additional Sub Product	<null></null>	RTS23/Field37	
	Underlying Asset type	Q - Multi commodity	CFI/3rd letter	Att#1

## 4.7 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	
	Expiry date	2017-12-31	RTS23/Field24	
Product	Underlying instrument ISIN	EZ1122334455	RTS23/Field26	
	Underlying Asset type	J - Energy	CFI/3rd letter	Att#1
Definition Input	Option type	Call	RTS23/Field30 / CFI 4th Opts	Att#2
	Option exercise style	American	RTS23/Field33 / CFI 4th Opts	Att#2
	Valuation Method or Trigger	V - Vanilla	CFI/5th Opts	Att#3
	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	Att#4
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New	DSB	
	Status Reason		RTS23/Field26 CFI/3rd letter RTS23/Field30 / CFI 4th Opts RTS23/Field33 / CFI 4th Opts CFI/5th Opts RTS23/Field34; CFI/6th letter RTS23/Field25 DSB DSB DSB DSB DSB RTS23/Field1 RTS23/Field2 RTS23/Field2 RTS23/Field3	
	Last Update DateTime	2017-07-31T12:00:00	DSB	
	Version	1	DSB	
Product	Parent	<null></null>	DSB	
Definition	Identification	ISIN	RTS23/Field1	
Derived	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	

#### 4.8 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		
	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
Donald at	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	Att#4
Product	Base Product	NRGY	RTS23/Field35	
Definition	Sub Product	NGAS	RTS23/Field36	
Input	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	
	ISIN Status	New	DSB	
	Status Reason		CFI/2nd letter CFI/1st letter  RTS23/Field13 RTS23/Field24 CFI/4th Swaps/5th Fwds RTS23/Field34; CFI/6th letter RTS23/Field35 RTS23/Field36 RTS23/Field37 RTS23/Field38 RTS23/Field39  RTS23/Field39	
	Last Update DateTime	2017-07-31T12:00:00	DSB	
	Version	1	DSB	
Dunadurat	Parent	<null></null>	DSB	
Product Definition	Identification	ISIN	RTS23/Field1	
Derived	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

# 4.9 Multi\_Exotic\_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	Multi_Exotic_Forward		
	Level	InstRefDataReporting		
	Notional Currency	GBP	RTS23/Field13	
	Expiry date	2017-12-31	RTS23/Field24	
	Base Product	eg: NRGY, MCEX	RTS23/Field35	
	Underlying Instrument Index	Optional : OTHER	RTS23/Field28	
Product	Underlying Instrument Index Prop	Optional (array)	DSB	
Definition	Return or Payout Trigger	F - Forward price of underlying instrument	CFI/4th Swaps/5th Fwds	Att#3
Input	Delivery type	C - CASH	RTS23/Field34; CFI/6th letter	Att#4
	Transaction Type	FUTR	RTS23/Field38	
	Final Price type	OTHR	RTS23/Field39	
	Reference Rate	Optional (array): OIL-BRENT/BFOE-ARGUS CRUDE, OIL- BRENT/BFOE-PLATTS MARKETWIRE etc	DSB	
Defaulted Input	Price Multiplier	1	RTS23/Field25	
	ISIN Status	New	DSB	
	Status Reason		DSB	
	Last Update DateTime	2017-07-31T12:00:00	DSB	
	Version	1	DSB	
	Parent	<null></null>	DSB	
	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	
	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	
	Sub Product	<null></null>	RTS23/Field36	
	Additional Sub Product	<null></null>	RTS23/Field37	
	Underlying Asset type	M - Other	CFI/3rd letter	Att#1