

Derivatives Service Bureau

DSB UAT Provisional Product Definitions
Annex 5 – Commodities
July 2017

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Preface

Change History

Date	Change	Version	Author	Revision Details
13/04/17	Creation	0.1	Tony Birrell	Initial Version
24/04/17	Change	0.2	Tony Birrell	Amend Use_Case name
28/04/17	Change	0.3	Tony Birrell	Added Swaption definition
12/06/17	Change	0.4	Tony Birrell	Added further product definitions for UAT and amended existing
				definitions to include Reference rate

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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 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 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.

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2 CFI Enumerations

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

2.1 Commodities Swaps

C	har #1	Char #2	Char #3	Char #4	Char#5	Char #6
C	ategory	Group	Underlying asset	Return or payout trigger	Not Used	Delivery
	S 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 #1	Char #2	Char #3	Char #4	Char#5	Char #6
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

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2.3 Commodities Forwards

Char	#1	Char #2	Char #3	Char #4	Char#5	Char #6
Categ	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

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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	Natural Gas	Swap	Swap
2	Commodity	Energy	Natural Gas	Swap	Basis_Swap
3	Commodity	Energy	Natural Gas	Swap	Multi_Exotic_Swap
4	Commodity	Energy	Natural Gas	Option	Option
5	Commodity	Energy	Natural Gas	Option	Multi_Exotic_Option
6	Commodity	Energy	Natural Gas	Swaption	Swaption
7	Commodity	Energy	Natural Gas	Forward	Forward
8	Commodity	Energy	Natural Gas	Forward	Multi_Exotic_Forward

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3.2 Swap Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	CFI Char
	Asset Class	T - Commodities	<u>#2</u>
	Instrument Type	S - Swap	<u>#1</u>
	Product	Swap	
Product Definition Selection Product Definition Input Product Definition Input Product Definition Derived	Level	InstRefDataReporting	
	Notional Currency	GBP	
	Expiry date	2017-06-30	
	Return or Payout Trigger	C - Contract for Difference	<u>#4</u>
Dona do cata	Delivery type	C - Cash	<u>#6</u>
	Base Product	NRGY	
2 0	Sub Product	NGAS	
iliput	Additional Sub Product	<null></null>	
	Transaction Type	SWAP	
	Final Price type	OTHR	
	Reference Rate	NATURAL GAS-CHICAGO CITY-GATES-INSIDE FERC	
	Identification	ISIN	
	ISIN Status	New	
	Parent	<null></null>	
Dunadurah	Full Name	Commodities Swap NRGY NGAS GBP 20170630	
	Classification Type	STJCXC	
	Commodity Derivative Indicator	TRUE	
Derived	Issuer or operator of the trading venue identifier	NA	
	Short Name	NA/Swaps NRGY NGAS GBP 20170630	
	Price Multiplier	1	
	Underlying Asset type	J - Energy	<u>#3</u>

Product Definition Selection Product Definition Input Product Definition Derived

3.3 Basis_Swap Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	CFI Char
	Asset Class	T - Commodities	<u>#2</u>
Product Definition	Instrument Type	S - Swap	<u>#1</u>
Selection	Product	Basis_Swap	
Selection	Level	InstRefDataReporting	
	Notional Currency	GBP	
	Expiry date	2017-06-30	
	Return or Payout Trigger	C - Contract for Difference	<u>#4</u>
	Delivery type	C - Cash	<u>#6</u>
	Base Product	NRGY	
Dunalizat	Sub Product	NGAS	
Product Definition	Additional Sub Product	<null></null>	
Input	Other Base Product	NRGY	
прис	Other Sub Product	NGAS	
	Other Additional Sub Product	<null></null>	
	Transaction Type	SWAP	
	Final Price type	OTHR	
	Reference Rate	NATURAL GAS-CHICAGO CITY-GATES-INSIDE FERC	
	Other Reference Rate	NATURAL GAS-NYMEX	
	Identification	ISIN	
	ISIN Status	New	
	Parent	<null></null>	
		Commodities Swap Commo NRGY NGAS GBP	
Product	Full Name	20170630	
Definition	Classification Type	STJCXC	
Derived	Commodity Derivative Indicator	TRUE	
	Issuer or operator of the trading venue identifier	NA	
	Short Name	NA/Swaps NRGY NGAS GBP 20170630	
	Price Multiplier	1	
	Underlying Asset type	J - Energy	<u>#3</u>

3.4 Multi_Exotic_Swap Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	CFI Char
5 1 1	Asset Class	T - Commodities	<u>#2</u>
	Instrument Type	S - Swap	<u>#1</u>
	Product	Multi_Exotic_Swap	
Product Definition Selection Product Definition Input	Level	InstRefDataReporting	
	Notional Currency	GBP	
	Expiry date	2017-06-30	
Product	Underlying Instrument Reference rate	BCOM1, BCOM2, BCOMn	
Definition	Return or Payout Trigger	C - Contract for Difference	<u>#4</u>
Input	Delivery type	C - Cash	<u>#6</u>
	Transaction Type	SWAP	
	Final Price type	OTHR	
	Identification	ISIN	
	ISIN Status	New	
	Parent	<null></null>	
	Full Name	Commodity_Multi Exotic Swap MCEX GBP 20170630	
	Classification Type	STQCXC	
Product	Commodity Derivative Indicator	TRUE	
Definition	Issuer or operator of the trading venue identifier	NA	
Derived	Short Name	NA/Swaps MCEX GBP 20170630	
	Price Multiplier	1	
	Base Product	MCEX	
	Sub Product	<null></null>	
	Additional Sub Product	<null></null>	
	Underlying Asset type	Q - Multi commodity	<u>#3</u>

Product Definition Selection Product Definition Input Product Definition Derived

3.5 Option Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	CFI Char
5 1 1	Asset Class	T - Commodities	<u>#2</u>
	Instrument Type	H - Option	<u>#1</u>
	Product	Option	
Product Definition Selection Product Definition Input Product Definition Derived	Level	InstRefDataReporting	
	Notional Currency	GBP	
	Expiry date	2017-06-30	
	Option type	Call	<u>#4</u>
	Option exercise style	American	<u>#4</u>
Dun dun d	Valuation Method or Trigger	V - Vanilla	<u>#5</u>
	Delivery type	C - Cash	<u>#6</u>
	Base Product	NRGY	
input	Sub Product	NGAS	
	Additional Sub Product	<null></null>	
	Transaction Type	OPTN	
	Final Price type	OTHR	
	Reference Rate	NATURAL GAS-CHICAGO CITY-GATES-INSIDE FERC	
	Identification	ISIN	
	ISIN Status	New	
	Parent	<null></null>	
Dunadurak	Full Name	Commodities Option NRGY NGAS GBP 20170630	
	Classification Type	HTJBVC	
	Commodity Derivative Indicator	TRUE	
Deliveu	Issuer or operator of the trading venue identifier	NA	
	Short Name	NA/O NRGY NGAS Call GBP 20170630	
	Price Multiplier	1	
	Underlying Asset type	J - Energy	<u>#3</u>

Product Definition Selection Product Definition Input Product Definition Derived

3.6 Multi_Exotic_Option Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	CFI Char
	Asset Class	T - Commodities	<u>#2</u>
	Instrument Type	H - Option	<u>#1</u>
	Product	Multi_Exotic_Option	
Product Definition Selection Product Definition Input	Level	InstRefDataReporting	
	Notional Currency	GBP	
	Expiry date	2017-06-30	
	Underlying Instrument Reference rate	BCOMNG1, BCOMNG2, BCOMNG3	
Product	Option type	Call	<u>#4</u>
Definition	Option exercise style	American	<u>#4</u>
Input	Valuation Method or Trigger	V - Vanilla	<u>#5</u>
	Delivery type	C - Cash	<u>#6</u>
	Transaction Type	OPTN	
	Final Price type	OTHR	
	Identification	ISIN	
	ISIN Status	New	
	Parent	<null></null>	
	Full Name	Multi_Exotic_Option MCEX GBP 20170630	
	Classification Type	HTQBVC	
Product	Commodity Derivative Indicator	TRUE	
Definition	Issuer or operator of the trading venue identifier	NA	
Derived	Short Name	NA/O MCEX Call GBP 20170630	
	Price Multiplier	1	
	Base Product	MCEX	
	Sub Product	<null></null>	
	Additional Sub Product	<null></null>	
	Underlying Asset type	Q - Multi commodity	<u>#3</u>

Product Definition Selection Product Definition Input Product Definition Derived

3.7 Swaption Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	CFI Char
Product Definition Selection	Asset Class	T - Commodities	<u>#2</u>
	Instrument Type	H - Option	<u>#1</u>
	Product	Swaption	
Selection	Level	InstRefDataReporting	
Product Definition Input	Notional Currency	GBP	
	Expiry date	2017-06-30	
	Underlying instrument ISIN	EZ1122334455	
	Underlying Asset type	J - Energy	<u>#3</u>
	Option type	Call	<u>#4</u>
	Option exercise style	American	<u>#4</u>
	Valuation Method or Trigger	V - Vanilla	<u>#5</u>
	Delivery type	C - Cash	<u>#6</u>
	Identification	ISIN	
Product	ISIN Status	New	
	Parent	<null></null>	
	Full Name	Swaption EZ1122334455 GBP 20170630	
Definition	Classification Type	HTJBVC	
Derived	Commodity Derivative Indicator	TRUE	
	Issuer or operator of the trading venue identifier	NA	
	Short Name	NA/O Swpt Call GBP 20170630	
	Price Multiplier	1	

Product Definition Selection Product Definition Input Product Definition Derived

3.8 Forward Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	CFI Char
Product Definition Selection	Asset Class	T - Commodities	<u>#2</u>
	Instrument Type	J - Forward	<u>#1</u>
	Product	Forward	
	Level	InstRefDataReporting	
	Notional Currency	GBP	
Product Definition	Expiry date	2017-06-30	
	Return or Payout Trigger	F - Forward price of underlying instrument	<u>#5</u>
	Delivery type	C - Cash	<u>#6</u>
	Base Product	NRGY	
	Sub Product	NGAS	
Input	Additional Sub Product	<null></null>	
	Transaction Type	FUTR	
	Final Price type	OTHR	
	Reference Rate	NATURAL GAS-CHICAGO CITY-GATES-INSIDE FERC	
Product Definition Derived	Identification	ISIN	
	ISIN Status	New	
	Parent	<null></null>	
	Full Name	Commodities Forward NRGY NGAS GBP 20170630	
	Classification Type	JTJXFC	
	Commodity Derivative Indicator	TRUE	
	Issuer or operator of the trading venue identifier	NA	
	Short Name	NA/Fwd NRGY NGAS GBP 20170630	
	Price Multiplier	1	
	Underlying Asset type	J - Energy	#3

3.9 Multi_Exotic_Forward Product Definition

Section	ISO Attributes	NATIVE ISO Example Values	CFI Char
Product Definition Selection	Asset Class	T - Commodities	<u>#2</u>
	Instrument Type	J - Forward	<u>#1</u>
	Product	Multi_Exotic_Forward	
	Level	InstRefDataReporting	
Product Definition Input	Notional Currency	GBP	
	Expiry date	2017-06-30	
	Underlying Instrument Reference rate	BCOM1, BCOM2, BCOMn	
	Return or Payout Trigger	F - Forward price of underlying instrument	<u>#4</u>
	Delivery type	C - Cash	<u>#6</u>
	Transaction Type	FUTR	
	Final Price type	OTHR	
	Identification	ISIN	
	ISIN Status	New	
	Parent	<null></null>	
Product Definition Derived	Full Name	Multi_Exotic_Forward MCEX GBP 20170630	
	Classification Type	JTQXFC	
	Commodity Derivative Indicator	TRUE	
	Issuer or operator of the trading venue identifier	NA	
	Short Name	NA/Fwd MCEX GBP 20170630	
	Price Multiplier	1	
	Base Product	MCEX	
	Sub Product	<null></null>	
	Additional Sub Product	<null></null>	
	Underlying Asset type	Q - Multi commodity	<u>#3</u>

Product Definition Selection Product Definition Input Product Definition Derived