# Morgan Stanley Finance LLC as Issuer

# Legal Entity Identifier (LEI): 5493003FCPSE9RKT4B56

Issue of EUR 10,000,000 Notes linked to the MS Diversified Alpha 4% Index due December 2029

Guaranteed by Morgan Stanley under the

# Regulation S / 144A Program for the Issuance of Notes, Series A and B, Warrants and Certificates

The Offering Circular referred to below (as completed by this Pricing Supplement) has been prepared on the basis that any offer of Notes in any Member State of the European Economic Area or in the United Kingdom (each, a "Relevant State") will be made pursuant to an exemption under Regulation (EU) 2017/1129 (as amended, the "Prospectus Regulation") or the Prospectus Regulation as it forms part of "retained EU law", as defined in the European Union (Withdrawal) Act 2018 (the "EUWA") (the "UK Prospectus Regulation") from the requirement to publish a prospectus for offers of the Notes. Accordingly any person making or intending to make an offer in that Relevant State of the Notes may only do so in circumstances in which no obligation arises for the Issuer or any Distribution Agent to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or Article 3 of the UK Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation or Article 23 of the UK Prospectus Regulation, in each case, in relation to such offer. Neither the Issuer nor any Distribution Agent has authorised, nor do they authorise, the making of any offer of Notes in any other circumstances.

Warning: Neither this Pricing Supplement nor the Offering Circular referred to below constitutes a "prospectus" for the purposes of the Prospectus Regulation or the UK Prospectus Regulation, and the Pricing Supplement and the Offering Circular have been prepared on the basis that no prospectus shall be required under the Prospectus Regulation or the UK Prospectus Regulation in relation to any Notes be offered and sold under hereby.

THE NOTES ARE NOT DEPOSITS OR SAVINGS ACCOUNTS AND ARE NOT INSURED BY THE U.S. FEDERAL DEPOSIT INSURANCE CORPORATION OR ANY OTHER GOVERNMENTAL AGENCY OR INSTRUMENTALITY OR DEPOSIT PROTECTION SCHEME ANYWHERE, NOR ARE THEY OBLIGATIONS OF, OR GUARANTEED BY, A BANK.

PROHIBITION OF SALES TO EEA RETAIL INVESTORS: THE NOTES ARE NOT INTENDED TO BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO AND SHOULD NOT BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO ANY RETAIL INVESTOR IN THE EUROPEAN ECONOMIC AREA (THE "EEA"). FOR THESE PURPOSES, A RETAIL INVESTOR MEANS A PERSON WHO IS ONE (OR MORE) OF:

- (A) A RETAIL CLIENT AS DEFINED IN POINT (11) OF ARTICLE 4(1) OF DIRECTIVE 2014/65/EU, AS AMENDED ("MIFID II");
- (B) A CUSTOMER WITHIN THE MEANING OF DIRECTIVE (EU) 2016/97, AS AMENDED, WHERE THAT CUSTOMER WOULD NOT QUALIFY AS A PROFESSIONAL CLIENT AS DEFINED IN POINT (10) OF ARTICLE 4(1) OF MIFID II; OR
- (C) NOT A QUALIFIED INVESTOR AS DEFINED IN REGULATION (EU) 2017/1129, AS AMENDED.

CONSEQUENTLY, NO KEY INFORMATION DOCUMENT REQUIRED BY REGULATION (EU) NO 1286/2014, AS AMENDED (THE "PRIIPS REGULATION") FOR OFFERING OR SELLING THE NOTES OR OTHERWISE MAKING THEM AVAILABLE TO RETAIL INVESTORS IN THE EEA HAS BEEN OR WILL BE PREPARED AND THEREFORE OFFERING OR SELLING THE NOTES OR

OTHERWISE MAKING THEM AVAILABLE TO ANY RETAIL INVESTOR IN THE EEA MAY BE UNLAWFUL UNDER THE PRIIPS REGULATION

#### PROHIBITION OF SALES TO UK RETAIL INVESTORS:

THE NOTES ARE NOT INTENDED TO BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO AND SHOULD NOT BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO ANY RETAIL INVESTOR IN THE UNITED KINGDOM (THE "UK"). FOR THESE PURPOSES, A RETAIL INVESTOR MEANS A PERSON WHO IS ONE (OR MORE) OF:

- (A) A RETAIL CLIENT AS DEFINED IN POINT (8) OF ARTICLE 2 OF REGULATION (EU) NO 2017/565 AS IT FORMS PART OF "RETAINED EU LAW", AS DEFINED IN THE EUROPEAN UNION (WITHDRAWAL) ACT 2018 (THE "EUWA");
- (B) A CUSTOMER WITHIN THE MEANING OF THE PROVISIONS OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 ("FSMA") AND ANY RULES OR REGULATIONS MADE UNDER FSMA TO IMPLEMENT DIRECTIVE (EU) 2016/97, WHERE THAT CUSTOMER WOULD NOT QUALIFY AS A PROFESSIONAL CLIENT, AS DEFINED IN POINT (8) OF ARTICLE 2(1) OF REGULATION (EU) NO 600/2014 AS IT FORMS PART OF "RETAINED EU LAW" AS DEFINED IN THE EUWA; OR
- (C) NOT A QUALIFIED INVESTOR AS DEFINED IN REGULATION (EU) 2017/1129 AS IT FORMS PART OF "RETAINED EU LAW", AS DEFINED IN THE EUWA.

CONSEQUENTLY, NO KEY INFORMATION DOCUMENT REQUIRED BY REGULATION (EU) NO 1286/2014 AS IT FORMS PART OF "RETAINED EU LAW", AS DEFINED IN THE EUWA (THE "UK PRIIP'S REGULATION") FOR OFFERING OR SELLING THE NOTES OR OTHERWISE MAKING THEM AVAILABLE TO RETAIL INVESTORS IN THE UK HAS BEEN OR WILL BE PREPARED AND THEREFORE OFFERING OR SELLING THE NOTES OR OTHERWISE MAKING THEM AVAILABLE TO ANY RETAIL INVESTOR IN THE UK MAY BE UNLAWFUL UNDER THE UK PRIIP'S REGULATION

MIFID II PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET:

SOLELY FOR THE PURPOSES OF THE MANUFACTURER'S PRODUCT APPROVAL PROCESS, THE TARGET MARKET ASSESSMENT IN RESPECT OF THE NOTES HAS LED TO THE CONCLUSION THAT:

- (A) THE TARGET MARKET FOR THE NOTES IS ELIGIBLE COUNTERPARTIES AND PROFESSIONAL CLIENTS ONLY, EACH AS DEFINED IN DIRECTIVE 2014/65/EU (AS AMENDED, "MIFID II"); AND
- (B) ALL CHANNELS FOR DISTRIBUTION OF THE NOTES TO ELIGIBLE COUNTERPARTIES AND PROFESSIONAL CLIENTS ARE APPROPRIATE.

ANY PERSON SUBSEQUENTLY OFFERING, SELLING OR RECOMMENDING THE NOTES (A "DISTRIBUTOR") SHOULD TAKE INTO CONSIDERATION THE MANUFACTURER'S TARGET MARKET ASSESSMENT; HOWEVER, A DISTRIBUTOR SUBJECT TO MIFID II IS RESPONSIBLE FOR UNDERTAKING ITS OWN TARGET MARKET ASSESSMENT IN RESPECT OF THE NOTES (BY EITHER ADOPTING OR REFINING THE MANUFACTURER'S TARGET MARKET ASSESSMENT) AND DETERMINING APPROPRIATE DISTRIBUTION CHANNELS.

UK MIFIR PRODUCT GOVERNANCE/PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET:

SOLELY FOR THE PURPOSES OF THE MANUFACTURER'S PRODUCT APPROVAL PROCESS, THE TARGET MARKET ASSESSMENT IN RESPECT OF THE NOTES HAS LED TO THE CONCLUSION THAT:

- (A) THE TARGET MARKET FOR THE NOTES IS ONLY ELIGIBLE COUNTERPARTIES, AS DEFINED IN THE FCA HANDBOOK CONDUCT OF BUSINESS SOURCEBOOK ("COBS"), AND PROFESSIONAL CLIENTS, AS DEFINED IN REGULATION (EU) NO 600/2014 AS IT FORMS PART OF "RETAINED EU LAW", AS DEFINED IN THE EUROPEAN UNION (WITHDRAWAL) ACT 2018 ("EUWA") ("UK MIFIR"); AND
- (B) ALL CHANNELS FOR DISTRIBUTION OF THE NOTES TO ELIGIBLE COUNTERPARTIES AND PROFESSIONAL CLIENTS ARE APPROPRIATE.

ANY PERSON SUBSEQUENTLY OFFERING, SELLING OR RECOMMENDING THE NOTES (A "DISTRIBUTOR") SHOULD TAKE INTO CONSIDERATION THE MANUFACTURERS' TARGET MARKET ASSESSMENT; HOWEVER, A DISTRIBUTOR SUBJECT TO THE FCA HANDBOOK PRODUCT INTERVENTION AND PRODUCT GOVERNANCE SOURCEBOOK (THE "UK MIFIR PRODUCT GOVERNANCE RULES") IS RESPONSIBLE FOR UNDERTAKING ITS OWN TARGET MARKET ASSESSMENT IN RESPECT OF THE NOTES (BY EITHER ADOPTING OR REFINING THE MANUFACTURERS' TARGET MARKET ASSESSMENT) AND DETERMINING APPROPRIATE DISTRIBUTION CHANNELS.

#### PART A – CONTRACTUAL TERMS

THE NOTES DESCRIBED HEREIN AND ANY GUARANTEE IN RESPECT THEREOF, AND THE SECURITIES TO BE DELIVERED ON REDEMPTION OF THE NOTES (IF ANY) HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR THE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES. NEITHER THE ISSUER NOR THE GUARANTOR IS REGISTERED, OR WILL REGISTER, UNDER THE U.S. INVESTMENT COMPANY ACT OF 1940, AS AMENDED. TRADING IN THE NOTES HAS NOT BEEN APPROVED BY THE U.S. COMMODITY FUTURES TRADING COMMISSION UNDER THE U.S. COMMODITY EXCHANGE ACT OF 1936, AS AMENDED.

THE NOTES DESCRIBED HEREIN, ANY INTEREST THEREIN, ANY GUARANTEE IN RESPECT THEREOF AND THE SECURITIES TO BE DELIVERED ON REDEMPTION OF THE NOTES (IF ANY) MAY NOT BE OFFERED, SOLD, PLEDGED, ASSIGNED, DELIVERED OR OTHERWISE TRANSFERRED OR REDEEMED AT ANY TIME, DIRECTLY OR INDIRECTLY, WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT). HEDGING TRANSACTIONS INVOLVING ANY "EQUITY SECURITIES" OF "DOMESTIC ISSUERS" (AS SUCH TERMS ARE DEFINED IN THE SECURITIES ACT AND REGULATIONS THEREUNDER) MAY ONLY BE CONDUCTED IN ACCORDANCE WITH THE SECURITIES ACT. SEE "SUBSCRIPTION AND SALE" AND "TRANSFER RESTRICTIONS" IN THE ACCOMPANYING OFFERING CIRCULAR DATED 26 JUNE 2023. IN PURCHASING THE NOTES, A PURCHASER WILL BE DEEMED TO REPRESENT AND WARRANT THAT IT IS NOT (I) LOCATED IN THE UNITED STATES, (II) A U.S. PERSON, (III) SUBJECT TO U.S. FEDERAL INCOME TAX ON A NET BASIS (A "U.S. TAXPAYER") AND (IV) PURCHASING ON BEHALF OF, OR FOR THE ACCOUNT OR BENEFIT OF, ANY PERSON LOCATED WITHIN THE UNITED STATES, U.S. PERSON OR U.S. TAXPAYER.

#### THE NOTES ARE NOT RATED.

This document constitutes the Pricing Supplement relating to the issue of the Notes described herein. This Pricing Supplement must be read in conjunction with the Offering Circular dated 26 June 2023 and the supplements to the Offering Circular dated 27 July 2023, 11 August 2023, 9 October 2023, 25 October 2023, 13 November 2023 and 12 December 2023 (the "Offering Circular"). Full information on the Issuer, the Guarantor and the offer of the Notes is only available on the basis of the combination of this Pricing Supplement and the Offering Circular. Copies of the Offering Circular are available from the offices of Morgan Stanley & Co. International plc at 25 Cabot Square, Canary Wharf, London, E14 4QA. The Offering Circular has also been published on the website of Euronext Dublin (www.live.euronext.com) and the Luxembourg Stock Exchange (www.luxse.com).

# **Information Concerning Investment Risk**

Potential investors are urged to consult with their legal, regulatory, investment, accounting, tax and other advisors with regard to any proposed or actual investment in these Notes. Please see the Offering Circular together with the Pricing Supplement for a full detailed description of the Notes and in particular, please review the Risk Factors associated with these Notes (at pages 13 to 54 therein). Investors should also note the section entitled "Risk Factors and Investment Considerations" (pages 3 to 8 inclusive) in the Index Description at Annex 1 (Index Description - MS Diversified Alpha 4% Index) hereto.

A Non-U.S. holder will be subject to U.S. withholding tax unless the beneficial owner of the Note (or a financial institution holding the Note on behalf of the beneficial owner) furnishes the appropriate Form W-8, on which the beneficial owner certifies under penalties of perjury that it is not a U.S. person. If withholding or deduction of taxes is required by law (regardless of whether a holder furnished an appropriate form), payments on the Notes will be made net of applicable withholding taxes, and Morgan Stanley Finance LLC will not be required to pay any additional amounts to Non-U.S. holders with respect to any taxes withheld.

Morgan Stanley is not qualified to give legal, tax or accounting advice to its clients and does not purport to do so in this document. Clients are urged to seek the advice of their own professional advisers about the consequences of the proposals contained herein.

#### **GENERAL**

1.	(i)	Issuer:	Morgan Stanley Finance LLC
	(ii)	Guarantor:	Morgan Stanley
2.	(i)	Series Number:	26405
	(ii)	Tranche Number:	1
3.	Specified Co	urrency or Currencies:	EUR ("EUR")
4.	Aggregate Nominal Amount of the Notes:		
	(i)	Series:	EUR 10,000,000
	(ii)	Tranche:	EUR 10,000,000
5.	Issue Price:		100.00 per cent. of par per Note
6.	(i)	Specified Denominations:	EUR 1,000
	(ii)	Calculation Amount (Par):	EUR 1,000
7.	(i)	Issue Date:	20 December 2023
	(ii)	Trade Date:	13 December 2023
	(iii)	Interest Commencement Date:	Issue Date
	(iv)	Strike Date:	13 December 2023
	(v)	Determination Date:	13 December 2029, or if such day is not an Index Business Day (as defined in the Index Description), the immediately succeeding Index Business Day
8.	Maturity Da	te:	20 December 2029, subject to adjustment in accordance with the Business Day Convention in the event such date

is not a Business Day, provided that the Maturity Date

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shall always be at least five (5) Business Days following the Determination Date

9. (i) Supplementary Provisions for Not Applicable

Belgian Notes:

(ii) Minimum Redemption Not Applicable Amount:

10. Interest Basis: Fixed Rate. See paragraph 17 below.

11. Redemption/Payment Basis: Equity and Proprietary Index-Linked Redemption. See

paragraph 37(B) below

12. Change of Interest or Redemption/Payment Not Applicable

Basis:

13. Put/Call Options/Autocallable Early Redemption:

(i) Redemption at the Option of Not Applicable

the Issuer:

(Condition 24.5)

(ii) Redemption at the Non- Not Applicable

discretionary Option of the

Issuer

(Condition 24.6)

(iii) Redemption at the Option of Not Applicable

Noteholders:

(Condition 24.8)

(iv) Autocallable Early Not Applicable

Redemption:

(Condition 21)

(v) Other put/call options: Not Applicable

14. (i) Status of the Notes: As set out in Condition 4.1

(Condition 4)

(ii) Status of the Guarantee: As set out in Condition 4.2

15. Method of distribution: Non-syndicated

#### RELEVANT UNDERLYING

16.

(B) Single Index Notes, Index Basket Notes: Applicable

(Condition 10)

(i) Whether the Notes relate to a single index or a basket of

indices (each, an "Index") and

Single Index Notes

MS Diversified Alpha 4% Index (*Bloomberg code:* MSQTDAL4 < Index>), as more fully described in the

the identity of the Sponsor of an "Index Index (each, an Issuer"):

Index Description (as amended and updated from time to time, the "Index Description") which as of the Trade Date is as set out in Annex 1 (Index Description - MS

Diversified Alpha 4% Index) hereto.

For the purposes of Condition 10.9 (Definitions applicable to Equity and Proprietary Index-Linked Notes), the Index Sponsor as at the date hereof is

Morgan Stanley & Co. International plc.

Proprietary Index: The Index is a Proprietary Index (ii)

Exchange(s): Not Applicable (iii)

(iv) Related Exchange(s): Not Applicable

Benchmark Trigger Provisions: (v) Applicable

None Alternative Pre-nominated (vi)

Index:

# PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

17. Fixed Rate Note Provisions Applicable

(Condition 5)

(i) Rate(s) of Interest: 18.00 per cent.

> (Notwithstanding the definition of "Rate of Interest" in the Conditions, this is not expressed as a "per annum"

rate.)

Interest Period: (ii) As set out in Condition 2.1, unadjusted

(iii) **Interest Payment Date:** Maturity Date

(iv) Fixed Coupon Amount: EUR 180.00 per Calculation Amount, payable on the

Interest Payment Date defined in paragraph 17(iii)

above

(v) Broken Amount: Not Applicable

Day Count Fraction: (vi) Not Applicable

(vii) **Business Day Convention:** Modified Following Business Day Convention

(viii) Additional Business Centre(s): Not Applicable

(ix) Other terms relating to the method of calculating interest for Fixed Rate

Notes:

Not Applicable

Party responsible for calculating the (x)

Rate(s) of Interest and/or Interest

Amount(s):

See paragraph 55 below

(xi) Additional provisions determining Interest Amount

Not Applicable for

18. Floating Rate Note Provisions Not Applicable

	(Condition 6)	
19.	Zero Coupon Note Provisions	Not Applicable
	(Condition 7)	
20.	Dual Currency-Linked Note Interest Provisions	Not Applicable
	(Condition 8)	
21.	Equity and Proprietary Index-Linked Interest Note Provisions:	Not Applicable
	(Condition 10)	
22.	Commodity-Linked Interest Note Provisions	Not Applicable
	(Condition 11)	
23.	Currency-Linked Interest Note Provisions	Not Applicable
	(Condition 12)	
24.	Inflation-Linked Interest Note Provisions	Not Applicable
	(Condition 13)	
25.	Property-Linked Interest Note Provisions	Not Applicable
	(Condition 14)	
26.	Fund-Linked Interest Note Provisions	Not Applicable
	(Condition 15)	
27.	Futures Contract-Linked Interest Note Provisions	Not Applicable
	(Condition 16)	
28.	Credit-Linked Interest Note Provisions	Not Applicable
	(Condition 17)	
29.	ETN-Linked Interest Note Provisions (Condition 18)	Not Applicable
30.	Rate-Linked Interest Note Provisions (Condition 19)	Not Applicable
31.	Preference Share-Linked Interest Note Provisions (Condition 20)	Not Applicable

# PROVISIONS RELATING TO REDEMPTION

32. Call Option Not Applicable

(Condition 24.5 and Condition 24.6 (to the extent applicable))

33. Put Option Not Applicable

(Condition 24.8)

34. Autocallable Early Redemption Not Applicable

(Condition 21)

35. Final Redemption Amount of each Note Final Redemption Amount specified below in paragraph

37(B)(viii)

(Condition 24.1)

(i) Final Bonus: Not Applicable

36. Dual Currency Redemption Provisions Not Applicable

(Condition 8)

37. Equity and Proprietary Index-Linked Applicable Redemption Provisions:

(Condition 10)

(B) Single Index Notes

(i) Averaging Dates: Not Applicable

(ii) Averaging Date Disruption: Not Applicable

(iii) Observation Date(s): Not Applicable

(iv) Observation Period: Not Applicable

(v) Determination Time(s): As per Condition 10.9 (Definitions applicable to Equity

and Proprietary Index-Linked Notes)

(For the avoidance of doubt, in connection with the determination of the level of the Index in respect of any relevant day, the Determination Time for the purposes of such determination may occur on a day following

such day).

(vi) Valuation Date(s): Determination Date

(vii) Determination Agent responsible for calculating the Final Redemption Amount:

As per paragraph 55 below.

(viii) Provisions for determining Final Redemption Amount:

Unless previously redeemed, or purchased and cancelled in accordance with the Conditions, the Issuer shall redeem the Notes on the Maturity Date at the Final Redemption Amount per Note of the Specified Denomination determined by the Determination Agent

in accordance the following formula:

Calculation Amount x (Capital Protection +
Participation x Max [0%; Underlying Performance
- Strike])

Where:

"Capital Protection" means 100.00 per cent.

"Index Level" means, in respect of a relevant day, the Index Level (as defined in the Index Description) of the Index in respect of such day, as determined by the Determination Agent

"Final Index Level" means the Index Level in respect of the Determination Date, as determined by the Determination Agent and subject to adjustment and/or correction in accordance with the Conditions.

"Initial Index Level" means the Index Level in respect of the Strike Date, as determined by the Determination Agent and subject to adjustment and/or correction in accordance with the Conditions.

"Max", followed by a series of amounts (or values) inside square brackets, means whichever is the greater of the amounts (or values) separated by a semi-colon inside those square brackets, or, where such amounts (or values) in those square brackets are the same, such amount (or value).

"Participation" means 100.00 per cent.

"Strike" means 118.00 per cent.

"Underlying Performance" means an amount (expressed as a percentage) determined by the Determination Agent in accordance with the following formula:

#### Final Index Level / Initial Index Level

(ix) Provisions for determining
Final Redemption Amount
where calculation by reference
to Index is impossible or
impracticable or otherwise
disrupted:

As per the applicable provisions of Condition 10 (Provisions relating to Equity and Proprietary Index-Linked Notes)

(x) Weighting for each Index:

Not Applicable

(xi) Additional Disruption Events:

Change in Law, Hedging Disruption and Increased Cost

of Hedging shall apply

(xii) Business Day Convention:

Modified Following Business Day Convention

(xiii) Additional Business Centre(s):

Not Applicable

(xiv) Other special terms and conditions:

See paragraph 64 below.

38. Commodity-Linked Redemption Provisions

Not Applicable

(Condition 11)

39.	Currency-Li	nked Redemption Provisions	Not Applicable
	(Condition 12)		
40.	Inflation-Lir	nked Redemption Provisions	Not Applicable
	(Condition 1	13)	
41.	Property-Lin	nked Redemption Provisions	Not Applicable
	(Condition 1	14)	
42.	Fund-Linked	d Redemption Provisions	Not Applicable
	(Condition 15)		
43.	Futures Provisions	Contract-Linked Redemption	Not Applicable
	(Condition 1	16)	
44.	Credit-Link	ed Redemption Provisions	Not Applicable
	(Condition 1	17)	
45.	ETN-Linked	l Redemption Provisions	Not Applicable
	(Condition 18)		
46.	Rate-Linked	l Redemption Provisions	Not Applicable
	(Condition 1	19)	
47.	Preference Provisions:	Share-Linked Redemption	Not Applicable
	(Condition 2	20)	
48.	(i)	Early Redemption Amount upon Event of Default (Condition 29):	Qualified Financial Institution Determination
	(ii)	Early redemption amount payable upon an event described in Condition 10.2(d)/10.2(f)/10.4(a)(iii)/10.4 (b)(iii)/10.5(c)/10.6(c)/10.7(c)/10.8(c)/11.4(c)/11.6(d)/11.7(d)/11.8(b)/12.6(a)(iii)/12.8(c)/13.2(e)/13.6(c)/14.3/14.8/14.9(c)/15.4//19.9/19.10/20.6/20.7	Fair Market Value Less Costs
	(iii)	Early redemption amount(s) per Calculation Amount payable on redemption for taxation reasons:	Fair Market Value Less Costs
		(Condition 24.3)	

(iv) Early Redemption Amount Not Applicable (Condition 6.18)

CMS Reference Rate - Effect Not Applicable (v) of Benchmark Transition Event and Benchmark Amendment Event as described in Condition 6.19 (CMS Reference Rate -Effect of Index Cessation Event)

49. Illegality and Regulatory Event:

(Condition 30)

(i) Illegality and Regulatory Applicable Event:

(ii) Redemption Amount (Illegality and Regulatory Event):

Fair Market Value Less Costs

50. Substitution of Issuer or Guarantor with non Morgan Stanley Group entities:

Applicable

(Condition 41.2)

51. Governing Law: **English Law** 

# GENERAL PROVISIONS APPLICABLE TO THE NOTES

52. Form of Notes: Registered

(Condition 3)

Global Note Certificate registered in the name of a nominee for a common depositary for Euroclear and Clearstream, Luxembourg, exchangeable for Individual Note Certificates in the limited circumstances described

in the Global Note Certificate

53. Record Date: The Record Date is one Clearing System Business Day

before the relevant due date for payment

54. Additional Financial Centre(s) or other special provisions relating to Payment

Business Day:

Not Applicable

55. **Determination Agent:**  Morgan Stanley & Co. International plc (the "Determination Agent"). The Determination Agent shall act as an expert and not as an agent for the Issuer or the Noteholders. All determinations, considerations and decisions made by the Determination Agent shall, in the absence of manifest error, wilful default or bad faith, be final and conclusive and the Determination Agent shall have no liability in relation to such determinations except in the case of its wilful default or bad faith.

56. Details relating to Partly Paid Notes: amount of each payment comprising the Issue Price and date on which each payment is to be made and consequences (if any) of failure to pay,

Not Applicable

including any right of the Issuer to forfeit the Notes and interest due on late payment:

57. Details relating to Instalment Notes: amount of each instalment, date on which each payment is to be made:

Not Applicable

58. Redenomination, renominalisation and reconventioning provisions:

Not Applicable

59. Restrictions on free transferability of the Notes:

None

60. Inconvertibility Event Provisions A:

Not Applicable

(Condition 22)

61. Inconvertibility Event Provisions B:

Not Applicable

(Condition 22)

62. CNY Center:

Not Applicable

63. Taxation:

(i) Condition 28.1:

"Additional Amounts" is Not Applicable

(ii) Condition 28.3:

Implementation of Financial Transaction Tax:

Applicable

64. Other terms:

For the purposes of the Certificates:

- (i) the definition of "Scheduled Trading Day" in Condition 10.9 (*Definitions applicable to Equity and Proprietary Index-Linked Notes*) is amended by the deletion of the words "any day on which" in limb (c) thereof and substitution of the words "any day in respect of which" therefor; and
- (ii) for the avoidance of doubt, any reference in the Conditions to the level of the Index as calculated, published or determined "on" or "as at" a relevant date shall be deemed to be a reference to the level of the Index as calculated, published or determined "in respect of" such relevant date (irrespective of the time and date on which such level is published).

#### DISTRIBUTION

65. If syndicated, of Managers and underwriting commitments (and names and addresses of the entities agreeing to place the issue without a firm commitment or on a "best efforts" basis if such entities are not the same as the Managers)

Not Applicable

Date of Subscription Agreement:

Not Applicable

Stabilising Manager(s) (if any):

Not Applicable

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Morgan Stanley & Co. International plc, 25 Cabot 66. If non-syndicated, name and address of Dealer: Square, London E14 4QA 67. U.S. Selling Restrictions: Regulation S 68. Total commission and concession: In connection with the offer and sale of the Notes, the Issuer, the Dealer or their affiliates may pay to any intermediary a one time or recurring intermediary fee. Further information is available from the distributor upon request. 69. Additional selling restrictions: Not Applicable

#### **United States Taxation**

This discussion is limited to the U.S. federal tax issues addressed below. Additional issues may exist that are not addressed in this discussion and that could affect the federal tax treatment of an investment in the Notes. Investors should seek their own advice based upon their particular circumstances from an independent tax advisor.

A non-U.S. investor should review carefully the section entitled "United States Federal Taxation" in the Offering Circular.

# PURPOSE OF PRICING SUPPLEMENT

This Pricing Supplement comprises the pricing supplement required to issue, and to admit to the Official List of Euronext Dublin and to trade on its Global Exchange Market, the Notes described herein pursuant to the Regulation S / 144A Program for the Issuance of Notes, Series A and B, Warrants and Certificates.

# POTENTIAL SECTION 871(m) TRANSACTION

Please see paragraph 5 of Part B – Other Information to this Pricing Supplement for additional information regarding withholding under Section 871(m) of the Code.

#### RESPONSIBILITY

The Issuer accepts responsibility for the information contained in this Pricing Supplement.

Signed on behalf of the Issuer:

By:Duly authorised	
	(1/1/61
	AAAA

#### PART B - OTHER INFORMATION

#### 1. LISTING

Listings and admission to Trading Application is expected to be made by the Issuer

(or on its behalf) for the Notes to be admitted to the Official List of Euronext Dublin and to trading on its Global Exchange Market with

effect from on or around the Issue Date.

No assurances can be given that such application for listing and/or admission to trading will be granted (or, if granted, will be granted by the Issue Date). The Issuer has no duty to maintain the listing (if any) of the Notes on the relevant stock exchange(s) over their entire lifetime.

2. RATINGS

Ratings: The Notes will not be rated

# 3. PERFORMANCE OF THE INDEX AND OTHER INFORMATION CONCERNING THE INDEX

Further details on the Index can be found on Bloomberg page for the Index as specified at paragraph 16(B)(i) of Part A above.

The Issuer does not intend to provide post-issuance information with regard to the Index.

#### 4. OPERATIONAL INFORMATION

ISIN: XS2722464919

Common Code: 272246491

Any clearing system(s) other than Euroclear Bank S.A./N.V., Clearstream Banking *société anonyme* and the relevant identification number(s):

Not Applicable

CFI: DTZNFR

FISN: MORGAN STANLEY/ZERO CPNEMTN

2029122

Delivery: Delivery free of payment

Names and addresses of initial Paying

Agent(s):

As per the Conditions

Intended to be held in a manner which would allow Eurosystem eligibility:

No. Whilst the designation is specified as "no" at the date of these Pricing Supplement, should the Eurosystem eligibility criteria be amended in the future such that the Notes are capable of meeting them the Notes may then be deposited with one of the ICSDs as common safekeeper (and registered in the name of a nominee of one of the ICSDs acting as common safekeeper).

Note that this does not necessarily mean that the Notes will then be recognised as eligible collateral for Eurosystem monetary policy and intraday credit operations by the Eurosystem at any time during their life. Such recognition will depend upon the ECB being satisfied that Eurosystem eligibility criteria have been met.

5. **POTENTIAL SECTION 871(m)** TRANSACTION:

The Issuer has determined that the Notes should not be subject to withholding under Section 871(m) of the Code, and hereby instructs its agents and withholding agents that no withholding is required, unless such agent or withholding agent knows or has reason to know otherwise.

- 6. **PROHIBITION OF SALES TO EEA** Applicable **RETAIL INVESTORS**
- 7. **PROHIBITION OF SALES TO UK** Applicable **RETAIL INVESTORS:**
- 8. SWISS OFFER RESTRICTIONS:

The Notes documented in this Pricing Supplement may be considered structured products in Switzerland pursuant to Article 70 the Swiss Financial Services Act of 15 June 2018 ("FinSA") and are not subject to supervision by the Swiss Financial Market Supervisory Authority ("FINMA"). None of the Notes constitute a participation in a collective investment scheme within the meaning of the Collective Investment Schemes Act of 23 June 2006 ("CISA") and are neither subject to the authorisation nor the supervision by the FINMA and investors do not benefit from the specific investor protection provided under the CISA. Investors bear the credit risk of the Issuer.

Neither the Offering Circular nor this Pricing Supplement or any other offering or marketing material relating to the Notes constitute a prospectus pursuant to the FinSA, and such documents may not be publicly distributed or otherwise made publicly available in Switzerland, unless the requirements of FinSA for such public distribution are complied with.

The Notes documented in this Pricing Supplement are not being offered, sold or advertised, directly or indirectly, in Switzerland to retail clients (*Privatkundinnen und -kunden*) within the meaning of FinSA ("**Retail Clients**"). Neither this Pricing Supplement nor any offering materials relating to the Securities may be made available to Retail Clients in or from Switzerland. The

offering of the Notes, directly or indirectly, in Switzerland is only made by way of private placement by addressing the Securities (a) solely to investors classified as professional clients (*professionelle Kunden*) or institutional clients (*institutionelle Kunden*) within the meaning of FinSA ("**Professional or Institutional Clients**"), (b) to fewer than 500 Retail Clients, and/or (c) to investors acquiring securities to the value of at least CHF 100,000.

9. PROHIBITION TO OFFER TO RETAIL INVESTORS IN SWITZERLAND:

Applicable

10. DETAILS OF BENCHMARKS
ADMINISTRATORS AND
REGISTRATION UNDER EU
BENCHMARKS REGULATION

MS Diversified Alpha 4% Index is administered by Morgan Stanley & Co. International plc, who, as at the Issue Date, does not appear on the register of administrators and benchmarks established and maintained by the European Securities and Markets Authority pursuant to Article 36 of the Benchmarks (Regulation (EU) 2016/2011) (the "EU Benchmarks Regulation").

11. DETAILS OF BENCHMARKS
ADMINISTRATORS AND
REGISTRATION UNDER UK
BENCHMARKS REGULATION

MS Diversified Alpha 4% Index is administered by Morgan Stanley & Co. International plc, who, as at the Issue Date, does appear on the register of administrators and benchmarks established and maintained by the United Kingdom Financial Conduct Authority pursuant to Article 36 of Regulation (EU) 2016/2011 as it forms part of 'retained EU law' as defined in the European Union (Withdrawal) Act 2018 (the "UK Benchmarks Regulation").

#### ANNEX 1

#### INDEX DESCRIPTION - MS DIVERSIFIED ALPHA 4% INDEX

# INDEX DESCRIPTION

MS Diversified Alpha 4% Index

Bloomberg Page: MSQTDAL4

Date of initial publication: 13<sup>th</sup> December 2023 Last update: 13<sup>th</sup> December 2023

The MS Diversified Alpha 4% Index is the exclusive property of Morgan Stanley & Co. International plc and its Affiliates (the "Morgan Stanley Group"). Morgan Stanley and the MS Diversified Alpha 4% Index are trade marks of the Morgan Stanley Group and no person or entity should refer to any of the trade marks without the consent of a member of the Morgan Stanley Group and should not use any of the information in this Description for any purpose other than in relation to an investment or otherwise in connection with any Financial Product (as defined below) for which such consent has been obtained. The non-exclusive right to use the MS Diversified Alpha 4% Index as an underlying reference basis or otherwise for any Financial Product is granted only upon completion of a license agreement with a member of the Morgan Stanley Group. The Index Sponsor, the Index Calculation Agent and each member of the Morgan Stanley Group disclaim any responsibility for any unauthorised use of the MS Diversified Alpha 4% Index by any third party.

- (i) No representation is made by any member of the Morgan Stanley Group with respect to the eligibility of the MS Diversified Alpha 4% Index for investment for investment (including, but not limited to, compliance with the UCITS Directive (2009/65/EC), as amended and supplemented from time to time (the "UCITS Directive"), or its use in connection with any Financial Product to be entered into or held, by any prospective investor. Prospective investors should make their own independent analysis of whether the MS Diversified Alpha 4% Index meets the eligibility criteria for their investment (including, but not limited to, compliance with the UCITS Directive) or use by them in relation to the relevant Financial Product and of whether the MS Diversified Alpha 4% Index responds to their criteria, needs and objectives for investment or otherwise. The term "investor" will include any counterparty, holder or contract party in relation to a Financial Product.
- (ii)
  Nothing contained in this Description should be construed as an offer or solicitation to purchase or sell securities or to enter into any transaction or engage in investment activity of any kind. If you do invest in a Financial Product or engage in any other investment activity, you should ensure that you fully understand the nature of such investment and the risks involved and are satisfied that the investment is suitable and appropriate for your circumstances. If you are in any doubt about this you should take advice from an appropriately qualified advisor.

This Description does not constitute investment, taxation, legal, accounting or other advice, including within the meaning of Article 53 of the Financial Services and Markets Act 2000 (Regulated Activities) Order 2001 or investment advice within the meaning of Article 4(4) of MiFID II.

# This document (the "**Description**") consists of the following sections:

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# 1. <u>Introduction</u>

This Description sets out the methodology of the MS Diversified Alpha 4% Index (the "Index") and the basis on which the Index is calculated.

This Description is intended to provide the information relating to the Index required by the Regulation on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) 596/2014 ((EU) 2016/1011)) (as amended) (the "Benchmarks Regulation") as it forms part of "retained EU law" in the United Kingdom as defined in the European Union (Withdrawal) Act 2018 (as amended from time to time) (the "UK Benchmarks Regulation" and, together with the EU Benchmarks Regulation, the "Benchmarks Regulation"). This Index is a non-significant and regulated data benchmark for the purposes of the UK Benchmarks Regulation.

As at the date of publication of this Description, Morgan Stanley & Co. International plc appears on the register of benchmark administrators established and maintained by the Financial Conduct Authority pursuant to Article 36 of the Benchmarks Regulation. Morgan Stanley & Co. International plc's benchmark statement (the "MS Benchmark Statement") can be accessed via the following link:

https://www.morganstanley.com/content/dam/msdotcom/en/assets/pdfs/sales\_and\_trading\_disc losures/MSIP\_Benchmark\_Statement-Multi-Asset\_Signal-based\_Benchmark\_Family.pdf

Subject as provided in Section 10 (*Adjustment and Disruption Provisions*), this Description is subject to change or adjustment at any time (including, without limitation, in accordance with the requirements of the UK Benchmarks Regulation) and will be superseded by any subsequent Description. A copy of the current version of the Description can be obtained following the method described in Section 8 (*Publication*).

No one may reproduce, distribute or disseminate this Description, any information contained in this Description or any Index Level (as applicable) without the prior written consent of the Index Sponsor. This Description is not intended for distribution to, or use by any person in, a jurisdiction where such distribution is prohibited by law or regulation.

ESG Disclosures pursuant to Commission Delegated Regulation (EU) 2020/1817 of 17 July 2020 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation on how environmental, social and governance factors are reflected in the benchmark methodology, as on-shored in the United Kingdom by way of The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019:

EXPLANATION OF HOW ESG FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY		
Item 1. Name of the benchmark administrator.	Morgan Stanley & Co. International plc	
Item 2. Type of benchmark or family of benchmarks.	Multi Asset	
Item 3. Name of the benchmark or family of benchmarks.	Multi Asset Signal-based	

1	1
Item 4. Does the benchmark methodology for the benchmark	( No
or family of benchmarks take into account ESG factors?	` No

# 2. Risk Factors and Investment Considerations

Prior to making an investment decision in respect of any Financial Product, prospective investors should consider carefully all of the information set out in this Description, including in this Section 2 (*Risk Factors and Investment Considerations*). This Section 2 (*Risk Factors and Investment Considerations*) is intended to describe various risk factors which the Index Sponsor believes represent the principal risks associated with any securities issues, derivative transactions or other financial product the return of which is linked to, or otherwise determined by reference to, the Index (each such issue, transaction or product, a "Financial Product"). Each investor in relation to a Financial Product is referred to as a "Financial Product Investor". There may be other risks and considerations not set out below that prospective investors should consider that are relevant either to their particular circumstances or more generally, whether arising from market factors or otherwise. In particular, other risks may exist in relation to the Financial Product itself. Each prospective investor should make their own investigations and form their own views as to the appropriateness or otherwise of the Index taking into account their own circumstances.

#### Index Specific Risk Considerations

**Weights** – With respect to baskets with more than one Index Components, the Weight applied to each Index Component is determined by a rules-based algorithm. The correlation between the Index and Index Components, and the correlation between the Index Components, may vary over time and may increase or decrease by reference to a variety of factors, which may include macro-economic factors and speculation. The Weights applied may not be optimal weights.

**Costs** – The calculation of the Index Level includes a deduction for certain costs. Such costs are calculated in accordance with the methodology specified in this Description. Any such deduction(s) shall mean that the Index Level is less than would be the case if no costs were deducted.

**Leverage** – The formula used for calculating the Index Level in respect of an Index Business Day contains a multiplier in respect of the Basket Level. Therefore, the percentage change in the performance of the Index on each Index Business Day can be greater than any actual positive and/or negative performance of the Basket. Prospective investors should note that financial products or transactions referencing an index which include such a multiplier or leverage factor represent a very speculative and risk form of investment, since any loss in value of the relevant underlying reference asset may carry the risk of a disproportionately higher loss on the relevant financial product or transaction.

**Emerging Markets** – Any Financial Product referencing an index linked, directly or indirectly, to emerging markets jurisdictions will be exposed to the risks of volatility, governmental intervention and the lack of a developed system of law which are associated with such jurisdictions. An index linked indirectly to emerging markets, via securities, indices, commodities or currencies, may be exposed to the risks of economic, social, political, financial and military conditions in such jurisdictions, including, in particular, political uncertainty and financial instability; the increased likelihood of restrictions on export or currency conversion; the greater potential for an inflationary environment; the possibility of nationalisation or confiscation of assets; the greater likelihood of regulation by national, provincial and local governments, including the imposition of currency exchange laws and taxes; less liquidity in emerging market currency markets as compared to liquidity in developed markets and less favourable growth prospects, capital reinvestment and self-sufficiency.

**Effective Exposure** – The Effective Exposure is determined by a rules-based algorithm. The correlation between the Index and the Index Component may vary over time and may increase or decrease by reference to a variety of factors, which may include macro-economic factors and speculation.

**Reform of interest rate and other "benchmarks"** – The use and application of benchmarks such as EURIBOR in transactions and other documents have been the subject of recent national, international and other regulatory guidance and proposals for reform. Some of these reforms are already effective while others are still to be implemented. These reforms may cause such "benchmarks" to perform differently than in the past, or to disappear entirely, or have other consequences which cannot be predicted. Any such consequence could have a material adverse effect on the Index or any of its

constituents. Any of the international, national or other proposals for reform or the general increased regulatory scrutiny of "benchmarks" could increase the costs and risks of administering or otherwise participating in the setting of a "benchmark" and complying with any such regulations or requirements. Such factors may have the effect of discouraging market participants from continuing to administer or participate in certain "benchmarks," trigger changes in the rules or methodologies used in certain "benchmarks" or lead to the disappearance of certain "benchmarks." The disappearance of a "benchmark" or changes in the manner of administration of a "benchmark" could have materially adverse consequences in relation to the Index or any of its constituents. In particular, but without limitation, any change, cessation, increase in costs or other event relating to a "benchmark" may result in the occurrence of a Disruption Event in relation to the Index, pursuant to which the Index Sponsor may take action in accordance with this Description.

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**Different methods for calculating volatility may give different results** – There are different methods for calculating volatility, and using a different method from the method used for the purposes of the Index may give a different result. The volatility targeting methodology of the Index measures volatility with reference to a specified number of days. Measuring volatility over a different number of days may give a different result.

**Volatility targeting may be unsuccessful** - The volatility targeting methodology of the Index may not succeed in maintaining the annualised volatility of the level of the Index at the volatility target specified in respect of it. The actual annualised volatility of the level of the Index may be higher than or lower than the volatility target that is specified in respect of it. The volatility targeting methodology of the Index will not prevent a decrease in the level of the Index.

**Volatility targeting may result in reduced performance** – The volatility targeting methodology of the Index may result in the exposure of the Index to the Index Component being considerably less than 100%. This means that the gains of any Financial Product may be significantly less than the gains of any investment product linked to the Index Component.

**Rebalancing Period** – The Index rebalances on a monthly basis. However, such period may not be the optional holding period for the Index Components and a different holding period may produce higher returns.

The Index is adjusted by deductions included in the Index Level - Notional embedded costs, in the form of a Rebalancing Cost, a Funding Rate, Holding Cost and Funding Spread are included within the Index and will reduce the Index Level. Any such amounts will be deducted from the performance of the Index with the intention of reflecting synthetically the costs of implementing index servicing costs (which are applicable to the Index rather than the Index Components and are applicable on an ongoing basis) a strategy that mirrors the Index.

The Index may be adjusted by the deductions of a specified Decrement level – If so specified in the Description, the Index Level may be adjusted by the deduction of a Decrement, which represent the anticipated synthetic dividend payable by the Index Component, over the life of any Transaction in Financial Instruments. The deduction of a Decrement enables the Index Sponsor to replicate synthetically the economic performance of an index component with a fixed dividend yield.

# General Index Risk Considerations

(iii) The Index performance is subject to fluctuations – The Index is a notional, rules-based index comprising the Index Components and the Index Level may decline. The Index methodology described in this Description was developed based on historical data and conditions and there are no assurances that the methodology will generate positive performance in the future. The performance of the Index is dependent on many factors, including developments and trends in the markets for the Index Components. The Index performance can go up as well as down, and can register significant losses, including in some cases that the Index falls to zero. Any past performance of the Index (actual or simulated) is not an indication of its future performance.

(iv)
 (v) Risks and rewards of a Financial Product – Financial Product Investors should ensure that they review the economic terms of the relevant Financial Product and not only the terms of the Index in order to understand the risks and rewards of an investment in such

Financial Product.

- (vi)
  (vii) The Index is not an investment in the Index Components The Index is calculated as a "notional" index. This means that the Index is calculated by reference to the Index Component Value in respect of each Index Component, however the strategy embedded in the Index means that any return might be higher or lower than the aggregate performance of the Index Components. However, there is no requirement for the Index Sponsor to obtain an exposure in relation to any Index Component in order to calculate the Index.
- (viii)
   (ix) A Financial Product Investor will have no rights in respect of the Index Components or any Index Components The investment exposure provided by the Index is synthetic. An investment referenced to an Index therefore not make a Financial Product Investor a holder of, or give a Financial Product Investor a direct investment position in, an Index or any Index Component (or any components thereof).
- (xi) An investment in the Index may be subject to dilution, which may limit the gains in such investment The Index may be subject to dilution, such that Financial Product Investors may not benefit fully from increases or decreases (depending on whether the exposure is long or short) in the value of an Index Component. Dilution means that the return or loss on an investment is subject to a multiplier decreasing exposure to such investment and reducing the volatility and risk of loss should the value of such investment decline, but reducing the potential gain should the value of such investment increase. Financial Product Investors should be aware that if the value of an Index Component increases or decreases, an investment linked to the Index may not have the same magnitude of increased or decreased value as such Index Component.
- (xiii)
  No liability Notwithstanding any other provision within this Description, and subject as provided by any applicable law or regulation, in no event shall the Index Sponsor or the Index Calculation Agent, acting in each case in such capacity, be liable (whether directly or indirectly, in contract, tort or otherwise) for any loss incurred by any person that arises out of or in connection with the Index, including in relation to the performance of the Index Sponsor or the Index Calculation Agent, as applicable, of any part of its respective role under this Description, provided that nothing shall relieve each of the Index Sponsor and the Index Calculation Agent from any liability arising by reason of fraud or acts or omissions constituting any breach of regulation or other applicable law.
- (xiv)

  (xv) The Index Sponsor may make adjustments to this Description in certain circumstances The Index Sponsor may make adjustments to this Description without consulting with Financial Product Investors in circumstances where the Index Sponsor has determined that such change is not material to Financial Product Investors, including if it is of a formal, minor or technical nature. Before making any other adjustment to this Description, the Index Sponsor will give prior notice to Financial Product Investors. Such adjustments could include, but are not limited to: (i) adjusting any relevant Index Component Value, (ii) replacing or removing an Index Component, (iii) postponing the publication of an Index Level or (iv) suspending or cancelling the Index. Any adjustments made to the Index may impact its future performance and result in an adverse return to a Financial Product Investor.
- (xvii) **Discretion** This Description confers on each of the Index Sponsor and the Index Calculation Agent the right to make determinations, calculations, adjustments and modifications in relation to the Index and related matters, which involve, in certain circumstances, a degree of discretion in order to ensure that the Index can, where reasonably practicable, continue to be calculated and determined notwithstanding the relevant circumstances or, to allow a delay or a cancellation of the Index (including, without limitation, upon the occurrence of certain Adjustment Events or certain dilutive or concentrative events or other market disruption events in relation to Index Components as

specified in this Description). Such adjustments may include, without limitation, adjusting the composition of the Index which exposes Financial Product Investors to the risk that any replacement Index Component may perform differently from the original Index Component, which may have an adverse effect on the performance of the Index.

(xviii)

(xix) Each of the Index Sponsor and the Index Calculation Agent will, as far as reasonably practicable, exercise any such discretion with the aim of ensuring that the Index continues to reflect, as closely as possible, the underlying economic interest it is designed to represent. The exercise of these discretions may have a significant effect on the Index and a Financial Product. Financial Product Investors should note that they are exposed to the exercise by the Index Sponsor of such discretions and in exercising such discretions, the Index Sponsor and the Index Calculation Agent have no obligations to consider the interests of any other person including (but not limited to) Financial Product Investors. Each of the Index Sponsor and the Index Calculation Agent, unless otherwise specified, is required to act using reasonable discretion, however, there can be no assurance that the exercise of any such discretion (or the absence of exercise, as the case may be) will not increase or decrease the Index Level and/or alter the volatility of the Index.

(xx)

Correlation of Index Components – Correlation of Index Components indicates the level of interdependence among the individual Index Components with respect to their performance. If, for example, all of the Index Components (or the constituent assets of such Index Components) originate from the same sector and the same country or region, a high positive correlation may generally be assumed. Past rates of correlation may not be determinative of future rates of correlation. Prospective investors should be aware that, although Index Components may not appear to be correlated based on past performance, it may be that they suffer the same adverse performance following a general downturn or other economic or political event. Where the Index Components are subject to high correlation, any move in performance of the Index Components will exaggerate the performance of the Index.

(xxi)

(xxii) Political and economic factors – Index Component Values may be influenced by a number of circumstances, including, but not limited to, political events, general economic conditions, government intervention, changes in balances of payments and trade, domestic and international rates of inflation, international trade restrictions and currency devaluations. Any such circumstance (or a combination of them) may cause unexpected volatility or illiquidity in the relevant markets. The Index may fail to take account of such events and, as a result, investment losses may occur which may in turn have an adverse effect on the performance of a Financial Product.

(xxiii)

(xxiv) With respect to any emerging or developing nation, there is the possibility of nationalisation, expropriation or confiscation, political changes, government regulation, social instability or other developments (including war) which could affect adversely the economies of such nations or Index Component Values that are linked or have an exposure to such nations.

(xxv)

(xxvi) Market volatility – The underlying markets for Index Components (including, without limitation and, if applicable, in commodities, metals, financial instruments, interest rates and indices) may be volatile and subject to sudden fluctuations of varying magnitude, any may be influenced by, amongst other things, government trade, fiscal, monetary and exchange control programmes and policies, national and international political and economic events and changes in interest rates. The volatility of such underlying markets may render it difficult or impossible to predict or anticipate fluctuations in the value of Index Components which could result in losses and an adverse effect on the Index.

(xxvii)

(xxviii) Rules-based Index – The Index is quantitative and rules-based and is not managed actively by the Morgan Stanley Group or any third party. Consequently, the Morgan Stanley Group does not have discretion to change this Description if there are significant changes in the performance of the Index Components that cause the Index to decline significantly or underperform.

(xxix)

(xxx) Information about the Index is no guarantee of the performance of the Index – Certain presentations and historical analysis or other statistical analysis materials in respect of the

operation and/or potential returns of the Index which may be provided are based on a number of assumptions, historical estimates, simulated analyses and hypothetical circumstances to estimate how the Index may have performed prior to its actual existence. The Index Sponsor may use historical data that is available to calculate the hypothetical level of the Index prior to its inception. If the Index Sponsor determines that such historical data is not available or is incomplete, the Index Sponsor may use alternate sources of data in place of such historical data as well as make certain modifications to the index methodology as it deems necessary to calculate the hypothetical level of the Index prior to its inception. The Index Sponsor provides no assurance or guarantee that the Index will operate or would have operated in the past in a manner consistent with those materials.

(xxxi) (xxxii)

Index Base Date – The Index will only have been calculated since the Index Base Date, being a date determined by the Index Sponsor as the date on which the Index Level would have been equal to the Initial Index Level based on back-testing (using simulated analyses and hypothetical circumstances, as further described in this Description). As such, any historical returns or any hypothetical simulations based on such back-tested data or analyses with respect to the period from the Index Base Date to the date on which Financial Products are first implemented (which may be materially later than the Index Base Date), may not reflect the performance of, and are no guarantee or assurance in respect of the performance or returns of, the Index over any time period.

(xxxiii)

Limited operating history and unanticipated performance – The Index is a relatively new strategy. Where limited historical performance data exists with respect to the Index Components and the Index itself, any investment in respect of which returns are linked to the performance of the Index or the Index Components may involve a greater risk than an investment linked to returns generated by an investment strategy with a proven track record. While a longer history of actual performance could provide more reliable information on which to assess the validity of the Index and on which to base an investment decision, the fact that the Index and the Index Components are relatively new would not allow this. There can be no guarantee or assurance that the Index or the Index Components will operate in a manner consistent with the data available.

(xxxiv)

(xxxv) Reliance on information — Calculations related to the Index may rely on information obtained from various publicly available sources. The Morgan Stanley Group and the Index Calculation Agent have relied on and will rely on these sources. In addition, the Morgan Stanley Group and the Index Calculation Agent have not verified independently and will not verify independently the information extracted from these sources. Accordingly, Financial Product Investors are subject to the risk that such third party information is inaccurate or incomplete and, in such circumstances, any such inaccuracy or incompleteness will be reflected in the calculation of the Index and may have a material impact on the performance of the Index.

(xxxvi)

(xxxvii) **No disclosure of information** – The Morgan Stanley Group may be in possession at any time of information in relation to Index Components which may not be available to Financial Product Investors. There is no obligation on any member of the Morgan Stanley Group to disclose to Financial Product Investors any such information.

(xxxviii)

(xxxix) Conflict of interests – The Morgan Stanley Group (including the Index Calculation Agent and the Index Sponsor) may from time to time engage in transactions involving the Index Components for their own account and/or for the account of their clients and may act as market-maker for such Index Components. Such activities may not be for the benefit of Financial Product Investors and may have an effect on the value of the Index and, consequently, on the value and performance of any Financial Products. In addition, the Morgan Stanley Group may from time to time act in other capacities such as the issuer of investments or the advisor thereof. Morgan Stanley Group entities also may issue, hold or enter into financial instruments and/or enter into derivative contracts in respect of the Index Components and the use of such instruments and/or derivatives may affect the value of the Index Components. Morgan Stanley Group entities may, but are not obliged to, enter into hedging transactions in respect of the Index Components in order to meet obligations in respect of Financial Products or for any other purpose which may affect the value of such components or of any Financial Products. If they do, Morgan Stanley Group entities will

have certain rights pursuant to such hedging transactions and/or in relation to any transactions that have given them exposure to Index Components and will pursue actions and take steps as they deem appropriate to protect their own interests.

(xl)

(xli) In addition, the unwinding of such hedging transactions may affect the value of such Index Components or instruments which may affect the value of the Index. Morgan Stanley Group entities may make gains and/or losses from such hedging activity. In acting in any of these capacities, subject as provided by any applicable law or regulation, no member of the Morgan Stanley Group is obliged to take into account the interests of any person including (but not limited to) Financial Product Investors.

(xlii)

(xliii) Litigation and disputes – The Index Sponsor, the Index Calculation Agent or any member of the Morgan Stanley Group may be subject to litigation or arbitration proceedings or disputes with other entities. Any such event may adversely affect the ability of the Index Sponsor or the Index Calculation Agent to perform their duties in respect of the Index and, therefore, may adversely affect the Index and, consequently, any Financial Product.

(xliv)

(xlv) **Morgan Stanley research** – The Morgan Stanley Group may issue research reports on securities or other financial instruments that are, or may become, Index Components. These reports are independent of the obligations of the Index Sponsor and the Index Calculation Agent described in this Description.

(xlvi)

(xlvii) The Index Sponsor's determinations are final and conclusive – The Index Calculation Agent is responsible for compiling and calculating the Index pursuant to this Description and has certain discretions relating to the Index. The Index Sponsor retains the discretion to appoint an alternative Index Calculation Agent. The Index Sponsor retains the final discretion as to the manner in which the Index is calculated and constructed. Furthermore, the Index Sponsor has the final authority on the Index and the interpretation and application of this Description. The Index Sponsor makes no representation (implied or otherwise) as to the performance of any Index Component and/or the Index.

(xlviii)

(xlix) Tax Considerations – In July 2015, the U.S. Treasury Department and the Inland Revenue Service ("IRS") released a notice designating certain "basket contracts" and substantially similar transactions as "transactions of interest," subject to information reporting requirements as "reportable transactions" under Section 6011 of the U.S. Internal Revenue Code of 1986, as amended. The scope of this notice is unclear, and it is therefore possible that the Financial Products could be subject to the notice. In that case, Financial Product Investors would be required to report certain information to the IRS, as set forth in the applicable Treasury regulations regarding "reportable transactions". If the IRS determines such a transaction is a "transaction of interest" and Financial Product Investors fail to disclose the transaction, such holders could be subject to penalties. Financial Product Investors should consult their tax advisers regarding the potential application of this notice to Financial Products.

*(I)* 

# 3. Overview

This section provides an overview of a number of features of the Index. There are aspects of the Index to which this section does not refer. Prospective investors should read the entire Description, including (without limitation) Section 2 (Risk Factors and Investment Considerations), before making any investment decision. Capitalised terms not otherwise defined shall have the meaning given to them elsewhere in this Description.

# **Summary**

The Index aims to provide exposure to the Index Components and to maintain the volatility of the Index at a specified level through the use of the volatility target mechanism which adjusts the Effective Exposure if the predicted volatility of the Index exceeds the volatility target by a pre-specified trigger threshold.

An Index Level is calculated in relation to each Index Business Day by the Index Calculation Agent. This will be used in connection with one or more Financial Products issued or entered into by a member of the Morgan Stanley Group. Generally, only a Financial Product issued or entered into by a member of the Morgan Stanley Group is permitted to use or reference the Index (directly or indirectly) but other Financial Products issued or entered into by financial services providers other than members of the Morgan Stanley Group may be permitted to use or reference the Index with the consent of a member of the Morgan Stanley Group. A Financial Product Investor has no ownership or other rights to or in respect of Index Components in its capacity as a Financial Product Investor or any other assets which are from time to time comprised in the Index.

The Index references a "notional" or synthetic exposure to the Index Component and there is no actual portfolio of assets to which any person is entitled or in which any person has any ownership. The Index merely identifies the Index Component and a rules-based strategy, the performance of which is used as a reference point for calculating Index Levels.

This Section 3 (Overview) is subject to, and qualified by, the remainder of this Description.

# 4. Index Sponsor

The Index has been developed by Morgan Stanley & Co. International plc ("MSIP"). The Index is administered by the index sponsor or any successor thereto (the "Index Sponsor"). The initial Index Sponsor is MSIP.

The Index Sponsor controls the creation and operation of the Index administrative process, including all stages involved in the production and dissemination of the Index. The Index Sponsor also is responsible for the manner in which the Index is calculated and constructed, and is the final authority on the Index and the interpretation and application of this Description. Notwithstanding that the Index relies on information from third party sources, the Index Sponsor has primary responsibility for all aspects of the Index administration and determination process.

Although the Index Sponsor will obtain information for inclusion in or for use in the calculation of the Index from sources which the Index Sponsor considers reliable, the Index Sponsor will not independently verify such information and does not guarantee the accuracy and/or the completeness of the Index or any data included therein.

The Index Sponsor is not acting as a manager or an investment advisor in relation to the Index and has no relationship of agency or trust or any fiduciary duty to any person in respect of the Index and is not required to take the interests of any person into account in making any determination or calculation in relation to the Index.

The Index Sponsor makes no warranty or representation (implied or otherwise) as to the performance of any Index Component and/or the Index.

No Financial Product is sponsored, endorsed, sold or promoted by MSIP or the Index Sponsor, and neither MSIP nor the Index Sponsor makes any express or implied representations or warranties as to (a) the advisability of purchasing or assuming any risk in connection with any Financial Product, (b) the levels at which the Index stands at any particular time on any particular date, (c) the results to be obtained by the issuer or obligor of any Financial Product, or any Financial Product Investor, or any other person or entity from the use of the Index or any data included therein in connection with any licensed rights or for any other use or (d) any other matter. Neither MSIP nor the Index Sponsor make any express or implied representations or warranties of merchantability or fitness for a particular purpose with respect to the Index or any data included therein.

Subject as provided by any applicable law or regulation, and without limiting any of the foregoing, in no event shall MSIP/ or the Index Sponsor have any liability (whether in negligence or otherwise) to any person for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

Subject as provided by any applicable law or regulation, neither MSIP nor the Index Sponsor accepts any legal liability to any person for publishing or not continuing to publish for any period of time any Index Level at any particular place or any particular time.

MSIP may in its sole and absolute discretion delegate and/or transfer any of its obligations and/or functions in relation to the administration and determination of the Index to one or more third parties as it deems appropriate from time to time. MSIP in exercising such right is not required to take into account the interests of any Financial Product Investors or transactions linked in whole or in part to the Index.

# 5. Index Calculation Agent

The Index is calculated by MSIP (or any successor thereto) (the "Index Calculation Agent").

The Index Calculation Agent is responsible for compiling and calculating the Index pursuant to this Description. The Index Sponsor retains the discretion to terminate the appointment of the Index Calculation Agent and to appoint an alternative Index Calculation Agent.

Subject as provided by applicable law and regulation, the Index Calculation Agent expressly disclaims all liability for any inaccuracy in calculations and the publication of the Index, the information used for making adjustments to the Index and the actual adjustments, as well as for the quality, accuracy, timeliness or completeness of the information contained in the Index or this Description or for delays, omissions, interruptions in the delivery of the Index or information related to it. No liability to any person shall attach to the Index Calculation Agent in connection with the exercise or non-exercise by it of any powers, duties or discretions.

The Index Calculation Agent makes no representation (implied or otherwise) as to the performance of any Index Component and/or the Index.

The Index Calculation Agent's calculations and determinations in relation to the Index shall be binding on all persons in the absence of manifest error. The term "manifest error" as used herein shall mean an error that is plain and obvious and can be identified from the results of the calculation or determination itself without (i) recourse to the underlying data or (ii) any application or re-application of any formulae. No person (whether a Financial Product Investor or otherwise) will be entitled to proceed (and shall be deemed to have agreed to waive proceedings) against the Index Calculation Agent in connection with any such calculations or determinations or any failure to make any calculations or determinations in relation to the Index.

For so long as the Index Calculation Agent constitutes and calculates the Index, the Index Calculation Agent does not accept any liability for loss or damage of any kind (including, without limitation, any special, punitive, indirect or consequential damages (including loss of profits)) arising from the use of such information in any such calculation or determination. The Index Calculation Agent makes no representation (implied or otherwise) as to the performance of any Index Component and/or the Index itself and disclaims all warranties of merchantability or fitness for a particular purpose or use with respect to the Index or any information in connection with it.

# 6. Index Data

The Index is calculated on the basis of publicly available third party data. In particular, the Index will utilise the Index Component Value, the Index Funding Rate and the Funding Rate in respect of each Index Component as published on the relevant Index Component Price Source in respect of such Index Component.

No assurance can be given that any such Index Component Values, Index Funding Rate or Funding Rate will be published on the relevant Index Component Price Source, on the Index Funding Rate Screen Page or on the Funding Rate Screen Page accurately, in a timely manner or at all and the Index Sponsor and the Index Calculation Agent have relied on, and will rely on, such Index Component Values and Funding Rate as they are published on the relevant Index Component Price Source or Funding Rate Screen Page. Neither the Index Sponsor nor the Index Calculation Agent has independently verified the information extracted from such sources and accepts no responsibility or liability in respect thereof.

# 7. Calculation of the Index

# 7.1 Total Return Index Level

Where the Basket Return Type is specified in the Annex as "Total Return":

The Total Return Index Level in respect of the Index Base Date shall be equal to the Initial Index Level.

The Total Return Index Level in respect of each Index Business Day (each an "Index Business Day t") from (but excluding) the Index Base Date shall be an amount, expressed in the Index Currency, calculated by the Index Calculation Agent in accordance with the following formula:

$$\begin{split} TRIndex_t &= Max \left( 0, TRIndex_{t-1} \right. \\ &\times \left[ 1 + Effective \ Exposure_{t-1} \times \left( \frac{Basket_t}{Basket_{t-1}} - 1 \right) + (1 - Effective \ Exposure_{t-1}) \times Rate_{t-1} \right. \\ &\times \left. \frac{\Delta t}{DayCount} \right] - TC_t \right) \times (1 - AF_t) \end{split}$$

Where:

*max*, followed by amounts (or values) inside brackets, means whichever is the greater of the amounts (or values) separate by a semi-colon inside such brackets;

TRIndex Level(t-1) means the Total Return Index Level in respect of the Index Business Day immediately preceding Index Business Day t;

Effective Exposure(t-1) means the Effective Exposure in respect of Index Business Day t-1, calculated as per paragraph 7.3 below;

Basket(t) means the Basket Level in respect of Index Business Day t, calculated as per paragraph 7.7 below:

Basket(t-1) means the Basket Level in respect of the Index Business Day immediately preceding Index Business Day t;

Rate(t-1) means the Index Funding Rate in respect of the Index Business Day immediately preceding Index Business Day t;

 $\Delta t$  means the number of calendar days from (and including) the Index Business Day immediately preceding Index Business Day t to (but excluding) Index Business Day t;

DayCount means 360;

TC(t) means the Transaction Cost in respect of Index Business Day t and is an amount calculated by the Index Calculation Agent in accordance with the following formula:

$$TC_t = |Nb|$$
 Shares Basket  $(t) - Nb$  Shares Basket  $(t - 1)| \times Basket(t) \times RC$ 

Where RC is the Rebalancing Cost and has the meaning given to it in the Annex

AF(t) means, the Accrued Fee in respect of Index Business Day t, an amount calculated by the Index Calculation Agent in accordance with the following formula:

$$AF(t) = \left[\frac{\Delta t}{DayCount} \times Decrement \ Rate\right];$$
 and

Decrement Rate has the meaning given to it in the Annex

# 7.2 Excess Return Index Level

The Excess Return Index Level in respect of the Index Base Date shall be equal to the Initial Index Level.

Where the Basket Return Type is specified in the Annex as "Total Return":

The Excess Return Index Level in respect of each Index Business Day (each an "Index Business Day t") from (but excluding) the Index Base Date shall be an amount, expressed in the Index Currency, calculated by the Index Calculation Agent in accordance with the following formula:

$$\begin{aligned} ERIndex_t &= Max \left( 0, ERIndex_{t-1} \times \left[ 1 + Effective \ Exposure_{t-1} \times \left( \frac{Basket_t}{Basket_{t-1}} - 1 - Rate_{t-1} \times \frac{\Delta t}{DayCount} \right) \right] - TC_t \right) \\ &\times (1 - AF_t) \end{aligned}$$

Where the Basket Return Type is specified in the Annex as "Excess Return":

The Excess Return Index Level in respect of each Index Business Day (each an "Index Business Day t") from (but excluding) the Index Base Date shall be an amount, expressed in the Index Currency, calculated by the Index Calculation Agent in accordance with the following formula:

$$ERIndex_t = Max\left(0, ERIndex_{t-1} \times \left[1 + Effective \ Exposure_{t-1} \times \left(\frac{Basket_t}{Basket_{t-1}} - 1\right)\right] - TC_t\right) \times (1 - AF_t)$$

# 7.3 <u>Calculation of the Exposure</u>

The theoretical exposure (the "**Theoretical Exposure**") in respect of an Index Business Day shall be an amount calculated by the Index Calculation Agent in accordance with the formula set out below:

 $TheoreticalExposure_t = Min[maxExposure_t] UnconstrainedExposure_t]$ 

Where:

$$\label{eq:unconstrainedExposure} UnconstrainedExposure_t = \frac{\textit{Vol Target}}{\textit{Realised Volatility}\left(t\right)}$$

The exposure (the "**Exposure**") in respect of an Index Business Day shall be an amount calculated by the Index Calculation Agent in accordance with the formula set out below:

- Where Rebalance Rule is set as "ABSOLUTE" in the Annex: (li)

$$Exposure_t = \begin{cases} TheoreticalExposure_t \ if \ | TheoreticalExposure_t - Exposure_{t-1} \ | > Threshold \\ Exposure_{t-1}, \qquad Otherwise \end{cases}$$

- Where Rebalance Rule is set as "RELATIVE INVERSE" in the Annex:

$$Exposure_t = \begin{cases} TheoreticalExposure_t \ if \ \left| \frac{Exposure_{t-1}}{UnconstrainedExposure_t} - 1 \right| > Threshold \\ Exposure_{t-1}, \quad Otherwise \end{cases}$$

Where:

maxExposure has the meaning given to it in the Annex

VolTarget has the meaning given to it in the Annex

Threshold has the meaning given to it in the Annex Lag means has the meaning given to it in the Annex

Realised Volatility (t-Lag) means the Realised Volatility in respect of Index Business Day (t-Lag)

#### 7.4 Calculation of the Number of Shares Basket

The number of shares of the basket (the "Number of Shares Basket") in respect of any Index Business Day shall be an amount calculated by the Index Calculation Agent in accordance with the below formulae:

Where Index Business Day t is the Index Base Date or any of the following Lag – 1 Index Business Days:

$$NbShares\ Basket\ (t)=0$$

Where Index Business Day t falls on any subsequent day:

- In respect of the Total Return Index:

$$NbShares\ Basket\ (t) = \frac{Exposure_{t-Lag} \times TRIndex_{t-Lag}}{Basket_{t-Lag}}$$

- In respect of the Excess Return Index

$$NbShares\ Basket\ (t) = \frac{Exposure_{t-Lag} \times ERIndex_{t-Lag}}{Basket_{t-Lag}}$$

# 7.5 Calculation of the Effective Exposure

The effective exposure (the "**Effective Exposure**") in respect of an Index Business Day shall be an amount calculated by the Index Calculation Agent in accordance with the below formulae:

- In respect of the Total Return Index

Effective Exposure (t) = NbShares Basket (t) 
$$\times \frac{Basket(t)}{TRIndex_t}$$

- In respect of the Excess Return Index

(liii)

Effective Exposure (t) = NbShares Basket (t) 
$$\times \frac{Basket(t)}{ERIndex_t}$$

#### 7.6 Calculation of the Realised Volatility

The Realised Volatility in respect of an Index Business Day shall be an amount calculated by the Index Calculation Agent in accordance with the formula set out below:

- Where the Realised Volatility Format is set as ARITHMETIC in the Annex:

Realised Volatility 
$$(t) = Max(ST Vol(t), LT Vol(t))$$

Where:

$$ST\ Vol\ (t) = \sqrt{\frac{252}{ST\ Tenor\ \times STReturn\ Size}} \times \sum_{k=t-STTenor-1}^{t} \ln\left(\frac{Basket\ (k)}{Basket\ (k-STReturn\ Size)}\right)^{2}$$

$$LT \, Vol \, (t) = \sqrt{\frac{252}{LT \, Tenor \, \times LTReturn \, Size}} \times \sum_{k=t-LTTenor-1}^{t} \ln \left( \frac{Basket \, (k)}{Basket \, (k-LTReturn \, Size)} \right)^{2}$$

- Where the Realised Volatility Format is set as GEOMETRIC in the Annex:

Realised Volatility 
$$(t) = Max(ST Vol(t), LT Vol(t))$$

Where:

ST Vol (t) means:

(i) Where such Index Business Day is the Index Base Date or any of the immediately following ST Return Size – 1 Index Business Days, an amount calculated by the Index Calculation Agent in accordance with the following formula:

$$ST\ Vol\ (t) = Initial\ Volatility$$

(ii) in respect of each Index Business Day (t) from (but excluding) the Index Base Date, an amount calculated by the Index Calculation Agent in accordance with the following formula:

$$ST\ Vol\ (t) = \sqrt{\lambda_{ST} \times ST\ Vol\ (t-1)^2 + (1-\lambda_{ST}) \times \ln\left(\frac{Basket_t}{Basket_{t-ST\ Return\ Size}}\right)^2 \times \frac{252}{ST\ Return\ Size}}$$

LT Vol (t) means:

(i) Where such Index Business Day is the Index Base Date or any of the immediately following LT Return Size – 1 Index Business Days, an amount calculated by the Index Calculation Agent in accordance with the following formula:

$$LT \ Vol \ (t) = Initial \ Volatility$$

(ii) in respect of each Index Business Day (t) from (but excluding) the Index Base Date, an amount calculated by the Index Calculation Agent in accordance with the following formula:

$$LT \, Vol \, (t) = \sqrt{\lambda_{LT} \times LT \, Vol \, (t-1)^2 + (1-\lambda_{LT}) \times \ln \left(\frac{Basket_t}{Basket_{t-LT \, Return \, Size}}\right)^2 \times \frac{252}{LT \, Return \, Size}}$$

Where:

 $\lambda_{ST}$  has the meaning given to it in the Annex

ST Tenor has the meaning given to it in the Annex

ST Return Size has the meaning given to it in the Annex

 $\lambda_{LT}$  has the meaning given to it in the Annex

LT Tenor has the meaning given to it in the Annex

LT Return Size has the meaning given to it in the Annex

# 7.7 Calculation of the Basket

#### 7.7.0 Calculation of the Basket Level

Where the **Basket Return Type** is specified in the Annex as "**Total Return**", the Basket Level shall mean the Total Return Basket Level.

Where the **Basket Return Type** is specified in the Annex as "**Excess Return**", the Basket Level shall mean the Excess Return Basket Level.

#### 7.7.1 Calculation of the Total Return Basket Level

The total return basket level (the "**Total Return Basket Level**") in respect of the Initialisation Date shall be equal to the Initial Basket Level as defined in the Annex.

The Total Return Basket Level in respect of each Index Business Day from (but excluding) the Initialisation Date shall be an amount, expressed in the Index Currency, calculated by the Index Calculation Agent in accordance with the following formula:

 $TRBasket_t = TRBasket_{t-1} + Performance_t + CashPerformance_t + FundingCost_t - AHC_t$ 

Where:

 $Performance_t$  is defined in section 7.7.3

CashPerformancet is defined in section 7.7.4

 $FundingCost_t$  is defined in section 7.7.5

 $AHC_t$  is defined in section 7.7.7

#### 7.7.2 Calculation of the Excess Return Basket Level

The excess return basket level (the "Excess Return Basket Level") in respect of the Initialisation Date shall be equal to the Initial Basket Level as defined in the Annex.

The Excess Return Basket Level in respect of each Index Business Day from (but excluding) the Initialisation Date shall be an amount, expressed in the Index Currency, calculated by the Index Calculation Agent in accordance with the following formula:

$$ERBasket_t = ERBasket_{t-1} + Performance_t + TotalFundingCost_t - AHC_t$$

Where:

 $Performance_t$  is defined in section 7.7.3

 $TotalFundingCost_t$  is defined in section 7.7.6

 $AHC_t$  is defined in section 7.7.7

#### 7.7.3 Calculation of the Basket Performance

The basket performance (the "Basket Performance") in respect of each Index Business Day from (but excluding) the Initialisation Date shall be an amount, expressed in the Index Currency, calculated by the Index Calculation Agent in accordance with the following formula:

$$Performance_{t} = \sum_{i=1}^{N} Units_{i,t-1} \times (CL_{i,t} - CL_{i,t-1}) \times FX_{i,t}$$

Where:

N is the number of Index Components within the Basket as defined in the Annex

 $Units_{i,t-1}$  is the Number of Units of Basket Component i in respect of Index Business Day t-1 as defined in Section 7.6.5

CLit means the Index Component Value of Basket Component i in respect of Index Business Day t

FX<sub>i,t</sub> means the FX Rate for Basket Component i in respect of Index Business Day t

#### 7.7.4 Calculation of the Cash Performance

The cash performance (the "Cash Performance") in respect of each Index Business Day from (but excluding) the Initialisation Date shall be an amount, expressed in the Index Currency, calculated by the Index Calculation Agent in accordance with the following formula:

$$CashPerformance_t = CashBalance_{t-1} \times Rate_{t-1} \times DCF_{t-1,t}$$

Where:

$$CashBalance_t = Basket_t - \sum_{i=1}^{N} Units_t^{i|Funded \cap IndexCCY} \times CL_t^{i|Funded \cap IndexCCY}$$

 $i|Funded \cap IndexCCY$  means the Basket Component i, where such Basket Component is specified as Funded in the Annex <u>and</u> is denominated in the same currency as the Index Currency

 $DCF_{t-1,t}$  means the number of calendar days from (and including) Index Business Day t-1 to and (excluding) Index Business Day t divided by 360.

## 7.7.5 Calculation of the Funding Cost

The funding cost (the "Funding Cost") in respect of each Index Business Day from (but excluding) the Initialisation Date shall be an amount, expressed in the Index Currency, calculated by the Index Calculation Agent in accordance with the following formula:

$$FundingCost_{t} = \sum_{\mathit{CCY}} FundingBalance_{t-1}^{\mathit{CCY}} \times (Rate_{t-1}^{\mathit{CCY}} + Spread^{\mathit{CCY}}) \times \mathit{DCF}_{t-1,t} \times \mathit{FX}_{\mathit{CCY},t}$$

Where:

$$FundingBalance_{t}^{CCY} = -\sum_{i=1}^{N} Units_{t}^{i|Funded \cap CCY} \times CL_{t}^{i|Funded \cap CCY}$$

 $i|Funded \cap CCY$  means the Basket Component i, where such Basket Component is specified as Funded in the Annex <u>and</u> is denominated in currency CCY provided that such currency is <u>other</u> than the Index Currency

 $Rate_{t-1}^{CCY}$  means the Funding Rate for currency CCY as defined in the Annex

Spread<sup>CCY</sup> means the Funding Spread for currency CCY as defined in the Annex

#### 7.7.6 Calculation of the Total Funding Cost

The total funding cost (the "**Total Funding Cost**") in respect of each Index Business Day from (but excluding) the Initialisation Date shall be an amount, expressed in the Index Currency, calculated by the Index Calculation Agent in accordance with the following formula:

$$Total Funding Cost_t = \sum_{\mathit{CCY}} Total Funding Balance_{t-1}^{\mathit{CCY}} \times (Rate_{t-1}^{\mathit{CCY}} + Spread^{\mathit{CCY}}) \times \mathit{DCF}_{t-1,t} \times \mathit{FX}_{\mathit{CCY},t}$$

Where:

$$Total Funding Balance_t^{CCY} = -\sum_{i=1}^{N} Units_t^{i|Funded} \times CL_t^{i|Funded}$$

i|Funded means the Basket Component i, where such Basket Component is specified as Funded in the Annex

 $Rate_{t-1}^{CCY}$  means the Funding Rate for currency CCY as defined in the Annex

Spread<sup>CCY</sup> means the Funding Spread for currency CCY as defined in the Annex

## 7.7.7 Calculation of the Aggregate Holding Cost

The aggregate holding cost (the "Aggregate Holding Cost") in respect of each Index Business Day from (but excluding) the Initialisation Date shall be an amount, expressed in the Index Currency, calculated by the Index Calculation Agent in accordance with the following formula:

$$AHC_{t} = \sum_{i=1}^{N} N_{i,t-1} \times CL_{i,t} \times FX_{i,t} \times HC_{i} \times DCF_{t-1,t}$$

Where:

 $HC_i$  is the Holding Cost for Basket Component i as specified in the Annex.

#### 7.7.8 Calculation of the Number of Units of Basket Components

On the Initialisation Date, the Number of Units invested in the Basket Component i per unit of the Basket is calculated by the Index Calculation Agent in accordance with the following formula:

$$N_{i,t=0} = 0$$

In respect of any Index Business Day thereafter:

- If t is a Scheduled Basket Rebalancing Day:

$$N_{i,t} = \frac{W_i \times Basket_{Max(0,t-BasketUnitLag)}}{CL_{i,Max(0,t-BasketUnitLag)} \times FX_{i,Max(0,t-BasketUnitLag)}}$$

Otherwise

$$N_{i,t} = N_{i,t-1}$$

Where:

 $W_i$  means the Weight for Basket Component i as defined in the Annex

#### 7.8 Miscellaneous

Each Index Level shall be published by the Index Calculation Agent (rounded to two decimal places, with 0.005 being rounded upwards), as set out in Section 8 (*Publication*).

For the avoidance of doubt, the Index Level is tracked without rounding by the Index Calculation Agent, and all calculations in this Section 7 (*Calculation of Index*) are based on the unrounded Index Level, while the rounded level is disseminated for publication.

The methodology described in this Section 7 (*Calculation of the Index*) is subject to the provisions set out in Section 10 (*Adjustment and Disruption Provisions*).

## 7.9 <u>Index Live Date and Retrospective Calculations</u>

The Index has been calculated by the Index Calculation Agent since the Index Live Date on a live basis.

Index performance in respect of the period from (and including) the Index Base Date to (but excluding) the Index Live Date (the "Back-test Period") has been simulated and is not actual performance. Accordingly the Index has been calculated retrospectively by the Index Calculation Agent on a hypothetical basis with the Index having an Index Level equal to the Initial Index Level on the Index Base Date.

The Index was launched by the Index Sponsor on the Index Live Date. The Index has been calculated by the Index Calculation Agent for the period from (and including) the Index Base Date. All prospective

investors should be aware that any retrospective calculation of the Index means that no actual investment existed at any time during the period of the retrospective calculation and as such, the performance of the Index is purely hypothetical. Past performance (actual or simulated) is not a guide to future performance.

The methodology and the strategy used for the calculation and retrospective calculation of the Index have been developed with the advantage of hindsight. In reality, it is not possible to invest with the advantage of hindsight and therefore past performance is purely theoretical.

The market conditions which existed during the Back-test Period are not necessarily representative of the market conditions which may exist in the future. In addition, the market conditions in the Back-test Period do not reflect the effect on the relevant markets of the launch of the Index and of the delivery of exposures to the Index through Financial Products, which may include any hedging by the provider or issuer of such Financial Products. Where the Index has been developed to identify and to monetise a particular opportunity in the relevant markets, it should be noted that corresponding investments made by market participants, including any hedging by the providers of Financial Products, may erode such an opportunity, and therefore the hypothetical Index performance in respect of the Back-test Period may overstate the actual performance of any Financial Product.

## 8. Publication

Subject to Section 10 (*Adjustment and Disruption Provisions*) below, the Index Calculation Agent will make available (i) the Index Level in respect of each Index Business Day as soon as reasonably practicable after 8 am London time (the "**Index Publication Time**") on the second Index Business Day immediately following such Index Business Day or where, in the sole discretion of the Index Calculation Agent, publication on such Index Business Day is not possible or practicable, the immediately following Index Business Day on the Bloomberg Page or such other source as the Index Sponsor may select from time to time at its reasonable discretion and (ii) details of any adjustments made to the Index as described in Section 10 (*Adjustment and Disruption Provisions*) to Financial Product Investors.

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(Iv) Subject as provided by applicable law or regulation, the Index Sponsor accepts no liability to any person for any publication, suspension of publication or non-publication of the Index Level for any period or in any place.

(Ivi)

(Ivii) Any publication described in this Section 8 (*Publication*) may be restricted, except as otherwise provided by law, by means determined as appropriate for such purpose by the Index Sponsor in its reasonable discretion including, without limitation, restricting access to a limited set of persons in accordance with arrangements agreed between MSIP and such persons.

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#### 9. Definitions

"Adjustment Event" means (i) an Index Component Disruption Event, (ii) a Disruption Event, (iii) a Force Majeure Event, (iv) an Index Component Adjustment Event.

"Affiliate" means in relation to any entity (the "First Entity"), any entity controlled, directly or indirectly, by the First Entity, any entity that controls, directly or indirectly, the First Entity or any entity directly or indirectly under common control with the First Entity. For these purposes, "control" means ownership of a majority of the voting power of an entity.

"Accrued Fee" has the meaning given to it in Section 7.1

"Back-test Period" has the meaning given to in Section 7. (Index Live Date and Retrospective Calculations).

"Basket Mechanism" has the meaning given to it in Section 7.1.4.

"Basket Unit Lag" has the meaning given to it in the Annex

"Benchmarks Regulation" has the meaning given to it in Section 1 (Introduction).

"Bloomberg" means Bloomberg L.P. or any of its Affiliates, or any successor market price information provider(s).

"Bloomberg Page" has the meaning given to it in the Annex or any Successor Source thereto

"Change" has the meaning given to it in Section 10.2 (Adjustment procedures, notification and consultation process).

"Change in Law" means there has been a change in applicable law or regulation or the promulgation of or any change in the interpretation of any court, tribunal or regulatory authority with competent jurisdiction of any applicable law or regulation that prevents or will prevent the Index Sponsor and/or the Index Calculation Agent from calculating and/or publishing the Index.

"Description" has the meaning given to it on the second page of this Description.

"Disappearance or Unavailability Event" means there is (i) a permanent discontinuation of trading in an Index Component or (ii) a disappearance or permanent discontinuance or unavailability of an Index Component Value, notwithstanding the status of trading in the relevant Index Component (if applicable), or any other source data required to calculate the Index.

"Disruption Event" means each of (i) a Change in Law, (ii) a Disappearance or Unavailability Event, (iii) a Hedging Disruption, (iv) a Price Source Disruption Event or (v) a Termination of Data Licence.

"Financial Product" has the meaning given to it in Section 2 (Risk Factors and Investment Considerations).

"Financial Product Investor" has the meaning given to in Section 2 (Risk Factors and Investment Considerations).

"Force Majeure Event" means an event or circumstance has occurred beyond the reasonable control of the Index Sponsor (including, without limitation, a systems or IT failure (including, without limitation, a systems breakdown, incomplete or ineffective upgrade, malfunction, malware, virus or other similar circumstances affecting the Index Sponsor's information technology and related processing systems), fire, flood, building evacuation, natural or man-made disaster, act of God, armed conflict, act of terrorism, riot or labour disruption or any similar intervening circumstance) which directly or indirectly prevents or otherwise affects the determinations of the Index Sponsor and/or the Index Calculation Agent in relation to the Index.

"Funding Rate" has the meaning given to it in the Annex

"Funding Rate Screen Page" has the meaning given to it in the Annex

"FX Rate" has the meaning given to it in Annex

"FX Rate Screen Page" has the meaning given to it in the Annex

"Hedging Disruption" occurs if the Index Sponsor determines that a hypothetical market participant would as a result of extraordinary market circumstances relating to an Index Component, be unable, after using commercially reasonable efforts, to:

- a) Acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transactions or instruments it deems necessary to hedge its position in relation to any securities issue or other relevant transactions relating to or calculated by reference to the Index; or
- b) Realize, recover or remit the proceeds of any such transactions or instruments.

"Index" has the meaning given to it in Section 1 (Introduction).

"Index Base Date" has the meaning given to in in the Annex

"Index Business Day" has the meaning given to it in the Annex

"Index Calculation Agent" has the meaning given to it in Section 5 (Index Calculation Agent).

"Index Committee" has the meaning given to it in Section 12 (Governance).

"Index Component" means each component specified in Annex 1 hereto.

"Index Component Adjustment Event" means either an Underlying MS Index Adjustment Event or the occurrence of an Underlying MS Index Administrator/Benchmark Date.

"Index Component Disrupted Day" means any day which is Underlying MS Index Disrupted Day.

"Index Component Disruption Event" means any day which is an Underlying MS Index Disrupted Day for any of the index components.

"Index Component Price Source" means, in respect of an Index Component, as specified in Annex 1 hereto or, in each case, any Successor Source thereto.

"Index Component Scheduled Trading Day" means an Underlying MS Index Scheduled Trading Day in respect of such Underlying MS Index.

"Index Component Screen Page" means, in respect of an Index Component, as specified in Annex 1 hereto or, in each case, any Successor Source thereto.

"Index Component Type" means, in respect of each Index Component, as specified in the Annex hereto.

"Index Component Underlying Price Source" means, in respect of an Index Component, any information service, exchange or data source used to calculate the price or level of any share, security, commodity, rate, index or other component included in such Index Component, as determined by the Index Calculation Agent.

"Index Component Value" means the Underlying MS Index Level in respect of such Underlying MS Index:

"Index Currency" has the meaning given to it in the Annex.

"Index Funding Rate" has the meaning given to it in the Annex

"Index Funding Rate Screen Page" has the meaning given to it in the Annex

"Index Level" means, in respect of each Index Business Day, an amount, expressed in the Index Currency, being the level of the Index in respect of such Index Business Day, as determined in accordance with Section 7 (*Index Level*). If Return Type is set to Total Return, the Index Level is then equal to Total Return Index Level as determined in accordance with Section 7.1. If Return Type is set to Excess Return, the Index Level is then equal to Excess Return Index Level as determined in accordance with Section 7.2.

"Index Live Date" has the meaning given to it in the Annex

"Index Publication Time" has the meaning given to it in Section 8 (Publication).

"Index Sponsor" has the meaning given to it in Section 4 (Index Sponsor).

"Initial Index Level" has the meaning given to it in the Annex

"IOSCO" has the meaning given to it in Section 12 (Governance).

"Material Change" has the meaning given to it in Section 10.2 (Adjustment procedures, notification and consultation process).

"MiFID II" means Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (as may be amended or replaced from time to time).

"Morgan Stanley Group" has the meaning given to it on the front page of this Description.

"MSIP" has the meaning given to it in Section 3 (Overview).

"MS Benchmark Statement" has the meaning given to it in Section 1 (Introduction).

"NB Shares Basket" has the meaning given to it in Section 7

"Price Source Disruption" means any Index Component Price Source, Index Component Underlying Price Source, Index Funding Rate Screen Page, Funding Rate Screen Page or other source data required to calculate the Index is insufficient, inaccurate or unreliable or not available whether due to temporary or permanent discontinuance or failure of the price source for such data or otherwise, as determined by the Index Calculation Agent.

"Principles" has the meaning given to it in Section 12 (Governance).

"Return Type" has the meaning given to it in the Annex

"USD" means United States Dollar.

"Successor Source" means, in relation to any display page, other published source, information vendor or provider:

- (i) the successor display page, other published source, information vendor or provider that has been officially designated by the sponsor of the original page or source; or
- (ii) if the sponsor of the original page or source has not officially designated a successor display page, other published source, service or provider (as the case may be), the successor display page, other published source, service or provider, if any, designated by the relevant information vendor or provider (if different from such sponsor).

"TARGET2 Settlement Day" means a day on which the Trans-European Automated Real-time Gross Settlement Express Transfer system (TARGET2) is open.

"**Termination of Data Licence**" means the occurrence of a termination, revocation or suspension of any third-party license agreement or permission pursuant to which data is supplied to compile or calculate the Index.

"Theoretical Exposure" has the meaning given to it in Section 7.1.3.

"Underlying MS Index" means any Index Component specified as "Underlying MS Index" in Annex hereto.

### 10. Adjustment Provisions

#### 10.1 Adjustment Events

Subject as provided in Section 10.2 (*Adjustment procedures, notification and consultation process*), if the Index Sponsor determines in its reasonable discretion that an Adjustment Event has occurred or may occur, the Index Sponsor may acting in good faith and a commercially reasonable manner:

- (lix) substitute any Index Component or the Funding Rate (as applicable) which is affected by such Adjustment Event with a replacement component or rate (as applicable), provided that such replacement has substantially similar characteristics to the affected component or rate (as applicable), having regard to the manner in which the affected component or rate (as applicable) is used in the calculation of the Index (as determined by the Index Sponsor in its sole and absolute discretion) and, if so, will (I) determine the effective date of such substitution and (II) make such adjustment(s) to the terms of the Index as it deems appropriate to account for the effect on the Index of such substitution: and/or
- (lx) provide data from alternative but comparable sources to the Index Calculation Agent, in each case for such period as it determines appropriate;
- (lxi)
- (Ixii) determine that the Index Component Value in respect of any Index Component which is affected by such Adjustment Event in respect of each Index Business Day following the Index Business Day on which such Adjustment Event occurred (the "Relevant Day") shall be equal to the Index Component Value in respect of such Relevant Day;
- (lxiii)
- (lxiv) reallocate the portion of the Index exposed to any Index Component which is affected by such Adjustment Event to the cash until the next Index Business Day on which it determines that no Adjustment Event exists (and make such adjustment(s) to the terms of the Index as it deems appropriate to account for the effect on the Index of such reallocation;
- (lxv) make such determinations and/or adjustments to the terms of the Index as it considers appropriate to determine any part of the Index (including, without limitation, the value of any Index Component) or calculate the Index Level in respect of an Index Business Day; and/or
- (lxvi) delay calculating and making available the Index Level until the next Index Business Day on which it determines that no Adjustment Event exists; and/or
- (Ixvii) cancel the Index and permanently cease to calculate the Index Level.

## 10.2 Adjustment procedures, notification and consultation process

The Index is calculated on the basis of algorithmic formulas and therefore no discretion can be exercised by the Index Sponsor or the Index Calculation Agent in the calculation of the Index. The Index Sponsor will, subject as provided below, employ the methodology set out in this Description to calculate the Index. While the Index Sponsor currently employs this methodology, no assurance can be given that fiscal, market, regulatory, juridical, financial or, without limitation, any other circumstances will not arise that would, in the view of the Index Sponsor, necessitate or make desirable a modification or change to this Description.

However, on occasion, there may be situations, outside the pre-defined adjustments and rebalances, which may make an adjustment of the methodology appropriate or necessary to ensure that the Index continues to achieve its objectives. These situations may include fiscal, market, regulatory, juridical, financial or, without limitation, any other circumstances that was not anticipated to occur when the Index was launched.

The Index Sponsor may decide that these situations necessitate or make desirable a modification or change to this Description. Any such decision will however be taken in a commercially reasonable manner and exclusively in order to ensure that the Index continues to reflect, as closely as possible, the underlying economic interest it was designed to represent in the sole determination of the Index Sponsor and the Index Calculation Agent.

(Ixviii) The Index Sponsor may make any amendment to this Description (a "Change") which in its determination is not material to Financial Product Investors, including if it is of a formal, minor or technical nature or to correct a manifest error. In this case the Index Sponsor is not required to consult with Financial Product Investors. Details of the Change will be made available by the Index Sponsor in accordance with Section 8 (*Publication*). For the purposes of determining the materiality of a Change, the Index Sponsor shall consider a change to be material if it may have a potentially material effect on any future level of the Index.

(lxix) (lxx)

In relation to any Change to this Description other than as described in the immediately preceding paragraph (a "**Material Change**") the Index Sponsor will give prior notice to Financial Product Investors that a Material Change is proposed. Details of the Material Change will then be available upon request to the Index Sponsor to allow Financial Product Investors to give any comments on the proposed Material Change.

(lxxi)

(Ixxii) The Index Sponsor is required to give at least ten Index Business Days' notice of a Material Change before making this, provided that it may reduce this notice period to not less than one Index Business Day in the case of a Material Change which is required to ensure that the Index may be fully hedged on an effective basis by or on behalf of any member of the Morgan Stanley Group. Modifications or adjustments which the Index Sponsor may make include, without limitation, amendments to the methodology, and substitution or removal of underlying Index Components from the Index, which, in each case, may have a negative impact on the performance of the Index.

(lxxiii)

(lxxiv) Any comments from Financial Product Investors and the Index Sponsor's responses to these will be made accessible to Financial Product Investors upon request to the Index Sponsor, except where the comment provider has requested confidentiality. However any such comments and responses may not be available prior to the Material Change being made.

(lxxv)

Subject as provided in the MS Benchmark Statement, if any modification or adjustment is made to the composition or calculation of the Index in accordance with Section 10.2 (*Adjustment procedures, notification and consultation process*), the Index Sponsor will make such modifications or adjustments based on market conditions and other relevant factors as in the judgment of the Index Sponsor are necessary to ensure that the Index continues to reflect, as closely as possible, the underlying economic interest it is designed to represent.

#### 11. Errors and Corrections

If:

- (i) any Index Component Value in respect of any Index Component or other variable, input or other parameter that is used to calculate the Index is subsequently changed or corrected and the change or correction is published by the relevant Index Component Price Source or other data source (as applicable); or
- (ii) the Index Calculation Agent identifies an error or omission in any of its calculations or determinations with respect to the Index Level in respect of any Index Business Day (including, without limitation, following an incorrect implementation of the methodology set out in this Description, an error in data entry, or a manual or system error),

then, in each case, the Index Sponsor may correct and restate any published Index Level in respect of any relevant Index Business Day (including, without limitation, a correction and restatement of the Index Level published for any relevant Index Business Day with retrospective effect) and/or each subsequent Index Business Day. Upon the occurrence of such event, the Index Calculation Agent shall inform the Index Sponsor and MSIP promptly.

The Index Sponsor will determine whether such error requires a change in the composition or calculation of the Index and, if so, the procedures under Section 10.2 (Adjustment procedures, notification and consultation process) will apply.

## 12. Governance

Morgan Stanley has adopted the "Principles for Financial Benchmarks" published by the International Organization of Securities Commissions ("IOSCO") on 17 July 2013 (the "Principles") on a proportionate basis.

The Index and this Description have been approved in accordance with and are subject to the internal governance procedures implemented by Morgan Stanley in compliance with the Principles and managed by an internal oversight committee (the "Index Committee").

The functions of calculation and valuation of the Index on each Index Business Day, as described in this Description, are carried out by a separate team at Morgan Stanley which is organisationally independent from the Index Sponsor.

The remuneration of the team which carries out the function of the Index Calculation Agent is not linked to the performance of the Index.

### 13. Discontinuation

Notwithstanding Section 10 (*Adjustment and Disruption Provisions*), the Index Sponsor may, in its sole discretion, after consultation with the Index Committee (except where, in the circumstances set out under (iii) below, such consultation is not possible), discontinue calculating and publishing the Index at any time upon the occurrence of any of the following:

- (i) as outlined in Section 10 (*Adjustment and Disruption Provisions*), as the result of an Adjustment Event;
- (ii) the Index Sponsor and/or, where no successor to it is available in the determination of the Index Sponsor, the Index Calculation Agent terminates its index/strategy publication or calculation (as applicable) business;
- (iii) the Index Sponsor and/or the Index Calculation Agent is subject to a voluntary or involuntary liquidation, dissolution or winding-up or institutes or has instituted against it, by a regulator, supervisor or other similar official, a proceeding seeking a judgment of insolvency or bankruptcy or other similar;
- (iv) subject as provided by applicable law or regulation, the Index Sponsor determines that it shall no longer continue to publish the Index; and/or
- (v) the Index Sponsor determines in its sole and absolute discretion that the Index is or will be no longer representative of the economic reality it was intended to measure.

Upon any such discontinuance, the Index Sponsor will use commercially reasonable efforts to publicly announce such discontinuance as soon as is reasonably practicable prior to the effective date.

The Index Sponsor shall determine if a commercially reasonable alternative index, the sponsor of which is a member of the Morgan Stanley Group, is available for use as an alternative to the Index and, to the extent reasonably possible, it shall maintain the original Index in existence in order to facilitate an orderly transition to the alternative index.

## 14. <u>Important Information</u>

### **Complaints**

The Morgan Stanley Group has a complaints management policy and procedures for receiving, investigating and retaining records concerning complaints, details of which can be provided on request by emailing <a href="mailto:complaintsms@morganstanley.com">complaintsms@morganstanley.com</a>. If an investor has a complaint about the Morgan Stanley Group, they should raise it in the first instance with the employee acting for them. If they are not satisfied with the response of that employee (or if they prefer not to raise the matter with that employee) they may email the Compliance Department at complaints <a href="mailto:msc@morganstanley.com">msc@morganstanley.com</a>.

## **ANNEX**

## **INDEX MAIN DEFINITIONS:**

Index Currency	USD				
Initial Index Level	100				
Index Business Day	means a day (i) on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in London and New York ("LNB" and "NYB) (ii) for which the NYSE and the NYMEX are open for trading during their regular trading session ("NYS" and "NYO") (iii) which is not a TARGET Holiday ("TGT") (iv) which is not a London Metal Exchange Holiday ("LME") (v) which is not a Eurex trading holidays (STOXX contracts) ("SON")				
Index Base Date	19 <sup>th</sup> April 2013				
Initial Basket Level	100				
Initialisation Date	8 <sup>th</sup> January 2013				
Index Live Date	13 <sup>th</sup> December 2023				
Index Funding Rate	N/A				
Index Funding Rate Screen Page	N/A				
Bloomberg Page	MSQTDAL4 Index				

# **INDEX MAIN PARAMETERS:**

VolTarget	4%				
Return Type	Excess Return				
Basket Return Type	Excess Return				
Decrement Rate	0.00%				
Rebalancing Cost (RC)	0.10%				
maxExposure	250%				
Rebalance Rule	ABSOLUTE				
Realised Volatility Format	ARITHMETIC				
Initial Volatility	Not Applicable				
Lag	2				
Basket Unit Lag	2				
Threshold	5%				
ST Tenor	20				
LT Tenor	60				
ST Return Size	1				
LT Return Size	1				
Lambda ST	Not Applicable				
Lambda LT	Not Applicable				
Scheduled Basket Rebalancing Day	The last Index Business Day of each calendar month from (and including) the 31st of January 2013				

# **BASKET/INDEX COMPONENTS DEFINITIONS:**

**Primary Information** 

Index Component #	Index Component / Underlying MS Index	Index Component Price Source	Index Component Screen Page	Index Component ISIN
1	MS MSCB2CAB	Bloomberg (2 decimal points precision)	MSCB2CAB Index	N/A
2	MS Global Short Term Rates Trend Strategy	Bloomberg (2 decimal points precision)	MSQTSTRE Index	N/A
3	MS Commodities Congestion LTCX Index	Bloomberg (2 decimal points precision)	MSCBCLPX Index	N/A
4	MS Commodities Pair Value	Bloomberg (2 decimal points precision)	MSCBCPVL Index	N/A
5	MS FX Global Multi-Factor Index	Bloomberg (2 decimal points precision)	MSCFMFG1 Index	N/A
6	MS US Large Cap Long/Short Intraday Momentum Series 3 Index	Bloomberg (2 decimal points precision)	MSISL3ES Index	N/A
7	MS eVol Premium Index	Bloomberg (2 decimal points precision)	MSUSEVPM Index	N/A

# Main Definitions

Index Component #	Currency	Funded/Unfunded	Holding Cost	Funding Rate	Funding Spread	Weight	FX Rate (FX Rate Screen Page)
1	USD	Unfunded	0.50%	N/A	0.0%	21.00%	1 (Not Applicable)
2	USD	Unfunded	0.0%	N/A	0.0%	21.00%	1 (Not Applicable)
3	USD	Unfunded	0.0%	N/A	0.0%	21.00%	1 (Not Applicable)
4	USD	Unfunded	0.0%	N/A	0.0%	10.00%	1 (Not Applicable)
5	USD	Unfunded	0.0%	N/A	0.0%	10.00%	1 (Not Applicable)
6	USD	Unfunded	0.0%	N/A	0.0%	10.00%	1 (Not Applicable)
7	USD	Unfunded	0.0%	N/A	0.0%	7.00%	1 (Not Applicable)