# **NOMURA**

# Nomura Overnight Interest Rate Receiver Swap Indices

# 11 January 2021

	of the Nomura Overnight Interest Rate Receiver Swap Indices suite, which is built using the described in this Rulebook denominated in Index Currency as defined in Index Specification Table A rnational plc ("NIP"), who is responsible for the administration of the Index.
	rnational plc ("NIP"), who is responsible for the administration of the Index.
Index Sponsor Nomura Inte	
Start Date Please refer	to Appendix A for a list of the Start Date for each Index
Live Date Please refer	to Appendix A for a list of the Live Date for each Index
and published Please refer The Index Lease refer The Index Lease refer The Index Lease refer The Index Lease refer The Index (t)=Index (	f an Index Business Day t, the calculated level of the Index in respect of that day, denoted Index(t) and on the relevant Bloomberg page or any successor thereto. To Appendix A for a list of the relevant Bloomberg pages for the different variations. The Start Date shall be equal to 100.  Ex Business Day t where t > Start Date And t not a Roll Date: $ex(t-1) - \left[Swap\ rate_{FWD}(t) - Swap\ rate_{FWD}(t-1)\right] \times \frac{PV01_{FWD}(t)}{PV01_{FWD}(t-1)} \times 100 \times \frac{FX_t}{FX_{t,reset}}$ Date then: $ex(t-1) - \left[Swap\ rate_{Spot}(t) - Swap\ rate_{FWD}(t-1)\right] \times \frac{PV01_{Spot}(t)}{PV01_{FWD}(t-1)} \times 100 \times \frac{FX_t}{FX_{t,reset}}$ The Index Business Day immediately preceding Index Business Day t

Index Components	5
Forward Swap	A swap transaction with a maturity equal to the Underlying Swap Tenor and denominated in the Underlying Swap Currency, following the standard swap conventions for this tenor and currency, with an effective date on the Spot Date immediately following the next Roll Date  Please refer to Appendix B for a list of the standard swap conventions for different currencies and tenors
Spot Swap	A swap transaction with a maturity equal to the Underlying Swap Tenor and denominated in the Underlying Swap Currency, following the standard swap conventions for this tenor and currency, with an effective date on the Spot Date immediately following day t  Please refer to Appendix B for a list of the standard swap conventions
Spot Date	The swap spot date as defined by the standard swap convention for the Underlying Swap Currency Please refer to Appendix B for a list of the standard swap conventions for different currencies and tenors
Roll Date	The 15 <sup>th</sup> of each month, if this date is not a London and Local <sup>k</sup> Business Day then the immediately following London and Local <sup>k</sup> Business Day
Swap rate <sub>FWD</sub> (t)	For any Index Business Day t, the mid-market forward rate (quoted in percentage points) for the Forward Swap, as of 11:00 a.m. London Time on such Day, as determined using the processes and price sources specified in

	the Yield Curve methodology. Please refer to Appendix B for a list of the standard swap conventions for different currencies and tenors
Swap rate <sub>Spot</sub> (t)	For any Index Business Day t, the mid-market forward rate (quoted in percentage points) for the Spot Swap, as of 11:00 a.m. London Time on such Index Business Day, as determined using the processes and price sources specified in the Yield Curve methodology.
	Please refer to Appendix B for a list of the standard swap conventions for different currencies and tenors
Yield Curve	Yield Curve means, in respect of each Index and an Index Business Day, the relevant Yield Curve (as defined in the NIP Indices Yield Curve Methodology (as amended and/or supplemented from time to time and appended to the Control Framework Summary) in respect of such Index and Index Business Day.
	The Yield Curve is built using the interest rate curve determined and used by Nomura International plc in the ordinary course of its business as a dealer/market maker and for the purposes of its own audited books and records and certain other data, for more information please see the NIP Indices Yield Curve Methodology.
PV01 <sub>FWD</sub> (t)	For any Index Business Day t, the sensitivity of the Forward Swap present value to a change of 0.01% in the coupon for a swap notional of 1 as of 11:00 a.m. London Time on such Index Business Day, as determined using the processes and price sources specified in the Yield Curve methodology. Please refer to Appendix B for a list of the standard swap conventions for different currencies and tenors
PV01 <sub>Spot</sub> (t)	For any Index Business Day t, the sensitivity of the Spot Swap present value to a change of 0.01% in the coupon for a swap notional of 1 as of 11:00 a.m. London Time on such Index Business Day, as determined using the processes and price sources specified in the Yield Curve methodology.
	Please refer to Appendix B for a list of the standard swap conventions for different currencies and tenors
FX <sub>t</sub>	For any Index Business Day t,
	If Underlying Swap Currency is not equal to Index Currency, the exchange spot rate (quoted as the number of Index Currency per 1 unit of Underlying Swap Currency) as published on FX Price Source under FX Price Field at Trading Time for Underlying Swap Currency. Where Index Currency is defined in Index Specification Table in Appendix A and Underlying Swap Currency, Trading Time, FX Price Source and FX Price Field are defined in Instrument Specification Table in Appendix A.
	Else
	$FX_t = 1$
FX <sub>t,reset</sub>	For any Index Business Day t, the level of FX <sub>t</sub> on a day that is one Index Business Day prior to Index Business Day t.

General Definition	s
Index Business Day	Any day that is a London Business Day and Local <sup>k</sup> Business Day
Index Trading Business Day	Any day that is a London Business Day and Local <sup>k</sup> Business Day
Local <sup>k</sup> Business	Means the local calendar for Underlying Swap currency k:
Day	for k=GBP Local <sup>k</sup> = any day which is a London Business Day and an ICE Futures Europe (UK) Business Day but excluding 24-December and 31-December; and
	for k=JPY Local <sup>k</sup> = any day which is a Tokyo Business Day, a Tokyo Financial Exchange Business Day and a Osaka Exchange Business Day but excluding 24-December and 31-December.
	for k=USD Local <sup>k</sup> = any day which is a New York Business Day and a CME Business Day but excluding 24-December and 31-December.
London Business Day	A day (other than a Saturday or Sunday) on which commercial banks are open for general business in London
ICE Futures Europe (UK) Business Day	A day on which ICE Futures Europe is scheduled to be open (or would have been but for the occurrence of a market disruption event) for trading in British interest rate futures contracts.
Tokyo Business Day	A day (other than a Saturday or Sunday) on which commercial banks are open for general business in Tokyo

Tokyo Financial Exchange Business Day	A day on which Tokyo Financial Exchange is scheduled to be open (or would have been but for the occurrence of a market disruption event) for trading in Japanese interest rate futures contracts.
Osaka Exchange Business Day	A day on which Osaka Exchange is scheduled to be open (or would have been but for the occurrence of a market disruption event) for trading in Japanese interest rate futures contracts.
SIFMA Business Day	A day that is not a SIFMA US recommended holiday

Disruptions Even	ts / Fallbacks					
Index Adjustment	If, due to the occurrence of an error (i) in relation to the calculation or publication of the level of the Index, or (ii) in the method for determining the Index, the Index Sponsor has determined on any day (an "Adjustment Determination Date") that an adjustment to the Index is necessary in order to correct such error (an "Index Adjustment"), then the Index Sponsor will make such corresponding adjustments to the Index as it deems necessary, if any, in order to reflect the Index Adjustment (in each case in accordance with the principles and methodology of the Index.  The Index Sponsor may correct errors in accordance with Appendix 2, Section 13 of the Control Framework Summary ("Correction of Errors") and Appendix 2, Section 15 ("Changes to Methodology") where remediation requires change to the Index methodology.					
Index Disruption	If, in the opinion of the Index Sponsor, an Index Disruption Event has occurred or is occurring, including in respect of any Index Component utilised to calculate the level of the Index on any day, then, the Index Sponsor may (wit a view to preserving the objective of the Index):					
	i. delay or postpone the rebalancing and/or calculation of such affected Index Component until the relevant Index Disruption Event no longer exists, provided that, if such Index Disruption Event is continuing on the 5th Index Business Day following any such Index Determination Date (the "Delayed Index Determination Date"), then the Index Sponsor will determine the level of such affected Index Component as of the related Delayed Index Determination Date in accordance with (iii) below; and/or					
	ii. not calculate and publish the Index level for such day or delay the publication; and/or					
	iii. determine the level of any affected Index Component in respect of such relevant day (including without limitation the Yield Curve), in its sole discretion and acting in a commercially reasonable manner (regardless of whether or not a level of any such affected Index Component has been published by the Price Source in respect of such day) having regard to the standard of input date quality for the Index as determined by the Index Sponsor during the design of the Index, as set our in Appendix 2, Section 6 of the Control Framework Summary ("Data Sufficiency and Hierarchy of Input Data").					
Index Disruption Event	The determination by the Index Sponsor in its sole discretion that one or more of the following events (each an "Index Disruption Event") has occurred:					
	a. the material suspension of, a material limitation imposed on, or the cessation of the trading in an Index Component;					
	b. the failure of any Price Source to announce or publish any relevant price, level, rate or other data necessary for the determination of any Index Component;					
	c. the level published on any Price Source in relation to any price, level, rate or other data necessar to determine any Index Component is significantly different to the level of such data prevailing in the market;					
	d. a material change by the Price Source in the content, composition, constitution of, or in the formula for or method of calculating (a "Material Change") any Index Component (including where an such Material Change is due to an amendment or other modification to the rules and/or regulation of the Price Source);					
	e. the failure of any Price Source to open for trading during a scheduled trading session, or the earl closure thereof (without 48 hours prior notice to the market);					
	f. the occurrence of any event or circumstance which generally prevents, disrupts or impairs the ability of market participants in general to enter into transactions or obtain market values of the type which would be required to implement the Index in a commercially reasonable manne (including, without limitation, a significant widening in the bid/offer and/or a significant reduction in liquidity in an Index Component);					
	g. in respect of an Index Component or the Index, a systems failure, natural or man-made disaster act of God, armed conflict, act of terrorism, riot or labour disruption or any similar intervening circumstances beyond the Index Sponsor's reasonable control which prevents, disrupts, or impair the ability of the Index to achieve its economic objective, the prompt or accurate determination of					

the level of the Index, and/or the ability of the Index Sponsor or Index calculation agent to perform its role in respect of the Index; or

h. any other event or circumstance that, in the opinion of the Index Sponsor, prevents, disrupts or impairs the ability of the Index to achieve its economic objective or the prompt or accurate determination of the level of the Index, or any other event or circumstance which causes the Index Sponsor to reasonably conclude that as a consequence of such event or circumstance, if the level of the Index were to be determined, it should not be relied upon to represent the market or economic reality that the Index is intended to measure.

## **Index Modification**

Upon the occurrence of an Index Modification Event, the Index Sponsor may

- i. remove or replace such affected Index Component with an alternative futures or options contract, currency, rate, variable or other component (a "Replacement Index Component") which, in it its sole determination, is consistent with the objective of the Index and, where possible, is of the same or equivalent standard of quality as any input data and/or price source used prior to the occurrence of the Index Modification Event, having regard to the standard of input data quality for the Index as determined by the Index Sponsor during the design of the Index, as set out in Appendix 2, Section 6 of the Control Framework Summary ("Data Sufficiency and Hierarchy of Input Data"); and/or
- ii. make such other adjustments as it deems appropriate preserve the objective of the Index, taking into account the relevant Index Modification Event (including without limitation replacing certain Price Sources used for determining the Yield Curve).

The Index Sponsor may refrain from publishing the Index until the Index Modification Event ceases to exist.

For the purpose of the removal or replacement of any affected Index Component, the Index Sponsor shall make any other adjustments to the Index to account for the price or value of the affected Index Component at the time of its removal and any related charges, fees or taxes as well as the cost to the Index Sponsor for implementing any Replacement Index Component.

The Index Sponsor may modify the Index in accordance Appendix 2, Section 15 of the Control Framework Summary ("Changes to Methodology").

## Index Modification Event

An "Index Modification Event" shall be deemed to have occurred if:

- a. the Index Sponsor determines, in its sole discretion, that an Index Component (i) is no longer available (whether due to a permanent discontinuation of trading, disappearance or otherwise) or (ii) has been the subject of a Material Change in a manner which has or will have a material adverse effect on the Index achieving its stated objective; or
- b. the Index Sponsor determines, in its sole discretion, that the level published on any Price Source in relation to any price, level, rate or other data necessary to determine any Index Component (i) is discontinued, so as to materially affect the Index calculation or (ii) is repeatedly different to a significant extent from the level of such data prevailing in the market or (iii) no longer accurately and reliably represents the market and economic reality purported to be measured by that data, each as determined by the Index Sponsor acting in good faith and a commercially reasonable manner:
- c. the Index Sponsor determines, in its sole discretion, that any input data and/or price source in relation to an Index Component used to calculate the Index no longer meets the standard of input data quality for the Index as determined by the Index Sponsor during the design of the Index, as set out in Appendix 2, Section 6 of the Control Framework Summary ("Data Sufficiency and Hierarchy of Input Data");
- d. an Extraordinary Event has occurred or exists.

# Extraordinary Event

Means in respect of any Index Component means any of Change in Law, Index Component Disruption and/or Increased Cost of Index Implementation.

Change in Law means that, on or after the Index Live Date (i) due to the adoption of or any change in any applicable law or regulation (including, without limitation, any tax law), or (ii) due to the promulgation of or any change in the interpretation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority), the Index Sponsor determines in good faith that (x) it has become illegal to hold, acquire or dispose of an Index Component, or (y) there is a materially increased cost of trading in an Index Component for the Index Sponsor or its affiliates (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position).

**Index Component Disruption** means that the Index Sponsor or any of its affiliates or agents is unable, or it is impractical, after using commercially reasonable efforts, to (i) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to implement the Index, or (ii) realise, recover or remit the proceeds of any such transaction(s) or asset(s), including, without limitation, where such inability or impracticability has arisen by reason of (x) any restriction on making new or additional investments in any Index Component.

**Increased Cost of Index Implementation** means that the Index Sponsor or any of its affiliates would incur a materially increased (as compared with circumstances existing on the Index Live Date) amount of tax, duty, expense or fee to (i) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any

	transaction(s) or asset(s) it deems necessary to implement the Index, or (ii) realise, recover or remit the proceeds of any transaction(s) or asset(s).
Index Cancellation	The Index Sponsor may permanently cancel and discontinue calculating and publishing the Index, in accordance with Appendix 2, Section 17 of the Control Framework Summary ("Termination of Indices and Transitional Arrangements") (as defined below).
Price Source	Means, in respect of an Index Component, the publication, page (or any other origin of reference, including an exchange) containing (or reporting) the prices, levels, rates or other data utilised by the Index Sponsor for such Index Component. References to Price Source shall be construed as referring also to any successor publication, page or source on which the relevant prices, levels, rates or other data for a Index Component may be disseminated, as determined by the Index Sponsor it its sole discretion and acting in a commercially reasonable manner.
Index Component	Means, in respect of the Index, each underlying component index, futures contract, currency, rate, variable or other component necessary in order to determine a level of the Index (including the Yield Curve and any data used to determine the Yield Curve), in each case, in line with the then existing methodology of the Index.

Additional inform	nation in respect of the Index methodology
Governance Policy and Control Framework	The Index Sponsor has established a governance framework (the "Governance Policy and Control Framework") to ensure compliance with UK BMR¹ and the IOSCO Principles and any related measures and applicable FCA rules (each as amended or replaced from time to time)². The Governance Policy and Control Framework governs (amongst other things) the development, determination and operation of indices administered by the Index Sponsor. A summary of the Governance Policy and Control Framework (the "Control Framework Summary") is published on: <a href="www.nomuranow.com/portal/site/nnextranet/en/global-markets/structured-derivatives/quant-investment-strategies.shtml">www.nomuranow.com/portal/site/nnextranet/en/global-markets/structured-derivatives/quant-investment-strategies.shtml</a> . Please refer to the summary of the Governance Policy and Control Framework in respect of the following information applying to the Index methodology:
Criteria for Index Development and Input Data and Source Selection	The criteria and procedures used to develop this Index, and for selecting the sources of data inputs used in the Index, are set out in Appendix 2, Section 3 of the Control Framework Summary ("Index Design and Creation of New Indices") and Appendix 2, Section 6 ("Data Sufficiency and Hierarchy of Data Inputs").
Exercise of Expert Judgment and discretion	The Index Sponsor has adopted guidelines and procedures designed to promote consistency in the exercise of Expert Judgment and discretion for Index determinations. Further details are contained in Appendix 2, Section 14 of the Control Framework Summary ("Expert Judgment and Discretion").
Input Data Type Priority	The Index Sponsor applied the hierarchy for data inputs as set out in Appendix 2, Section 6 of the Control Framework Summary ("Data Sufficiency and Hierarchy of Data Inputs") when considering the data inputs used to construct the Index.
Index Error Reports and Revision	The Index Sponsor has adopted procedures for analysis and remediation of Index errors, and for potential restatement of a published Index level. Further details are contained in Appendix 2, Section 13 of the Control Framework Summary ("Correction of Errors") and Appendix 2, Section 15 ("Changes to Methodology") where remediation requires change to the Index Methodology.
Quantity and Quality of Input Data	The Index is constructed by the Index Sponsor using single prices or levels prescribed by the Index Methodology. The Index Sponsor therefore considers that the requirement to determine the thresholds of the quantity of data inputs, necessary to determine the Index accurately and reliably, has been met.
	The Index Sponsor determines the standards of quality of the data inputs used in this Index at the design stage of the Index in accordance with Appendix 2, Section 6 of the Control Framework Summary ("Data Sufficiency and Hierarchy of Data Inputs"). These standards are reflected in the Index Methodology, as described in this Rulebook. The Index Sponsor will review these standards and the data inputs on a periodic basis in accordance with Appendix 2, Section 16 of the Control Framework Summary ("Periodic Review of Indices") and in the full policies and procedures available on the Index Sponsor's public website, to ensure that the data inputs used continue to be of sufficient quality to determine the Index accurately and reliably, and will accordingly determine whether an Index Modification Event has occurred.

<sup>&</sup>lt;sup>1</sup> UK BMR means the United Kingdom Benchmark Regulation which comprises Regulation (EU) 2016/1011 ("EU BMR") as amended by Regulation (EU) 2019/2089 as regards EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks insofar as they are applicable in the United Kingdom by virtue of the European Union (Withdrawal) Act 2018 and other United Kingdom legislation which implements and amends retained European Union law in the United Kingdom including, but without limitation, the Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019, SI 2019/657.

<sup>&</sup>lt;sup>2</sup>https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf . The Governance Policy and Control Framework will be periodically reviewed and has been updated to reflect the requirements of EU BMR and will be updated in due course to reflect the requirements of UK BMR, as well as related measures and applicable FCA rules.

# Internal Reviews of the Index

The Index Sponsor is required to conduct internal reviews of the Index on a periodic basis. Further details regarding the frequency of those reviews, the procedures to be followed, and the bodies or functions within the Index Sponsor's organisational structure involved in such reviews, are contained in Appendix 2, Section 16 of the Control Framework Summary ("Periodic Review of Indices") and in the full policies and procedures available on the Index Sponsor's public website.

Reviews will further be conducted where the Index Sponsor considers it desirable or necessary to do so, including in response to specific events or otherwise. Specific events may include (without limitation) any index errors, index disruptions, or other index life-cycle events; changes in market circumstances; changes in the applicable legal or regulatory environment; any challenges or complaints or other feedback from stakeholders, and/or any material audit findings. Further information regarding the procedures to be followed in response to certain specific events, and the bodies or functions within the Index Sponsor's organisational structure involved in such reviews, can be found in Appendix 2, Sections 13 ("Correction of Errors"),14 ("Expert Judgment and Discretion"), 15 ("Changes to Methodology"), 19 ("Complaints Handling Policy"), 21 ("Audits"), and any other sections of the Control Framework Summary which may be relevant from time to time.

# **Index Approval**

The criteria and procedures used to approve the Index, and the bodies or functions within the Index Sponsor's organisational structure involved in such approval, are set out in Appendix 3 of the Control Framework Summary ("Main Features of Index Committee Constitution and Terms of Reference") and Appendix 2, Section 3 ("Index Design and Creation of New Indices").

# Investor Consultation upon Index termination and material changes to the Index methodology

The Index Sponsor is required to consult investors of index linked products when proposing material changes to the Index methodology and termination of the Index. Further details on the circumstances and procedures under which consultation takes place are contained in Appendix 2, Section 15 of the Control Framework Summary ("Changes to Methodology"), Appendix 2, Section 17 ("Termination of Indices and Transitional Arrangements") and in the full policies and procedures available on the Index Sponsor's public website.

# Active Market of the Index

As of the date of this Index Description, the Index Sponsor considers the underlying market of the Index to be active, in accordance with in Appendix 2, Sections 3 ("Index Design and Creation of New Indices and Methodologies") of the Control Framework Summary.

# Outsourcing of Index Determination

The Index Sponsor has outsourced certain IT, Quants, Middle Office and Structuring functions to Nomura Structured Finance Services (India) Private Limited subject to a corporate service agreement between the entities. Further details are contained in Appendix 2, Section 1 of the Control Framework Summary ("Oversight of Third Parties").

# **Index Disclaimer**

The Index Sponsor and its affiliates make no representation whatsoever, whether express or implied, either as to the results to be obtained from the use of an Index and/or the levels at which the relevant Index stands at a particular time on any particular date or otherwise. The Index Sponsor and its affiliates shall not be liable (whether in contract, tort or otherwise) to any person for any error in such Index.

The Index Sponsor and its affiliates make no representation whatsoever, whether express or implied, as to the advisability of purchasing or assuming any risk in connection with entering into any transactions or products which are linked to or deriving a value from an Index.

Neither the Index Sponsor nor its affiliates shall have any liability for any act or failure to act by the Index Sponsor in connection with the calculation, adjustment or maintenance of an Index. Although the Index Sponsor will obtain information concerning an Index from publicly available sources it believes reliable, such information may not have been independently verified. Accordingly, no representation, warranty or undertaking (express or implied) is made and no responsibility is accepted by the Index Sponsor or its affiliates as to the accuracy, completeness and timeliness of information concerning an Index or any other information provided by any person in connection with the information described herein, or as to the continuance of calculation or publication of an Index.

Nothing in this disclaimer shall exclude or limit liability to the extent such exclusion or limitation is not permitted by law or regulation to which the Index Sponsor is subject.

# **Appendix**

_			_
Δn	nan	div	Δ.
Ap	PCII	UIA	л.

Index Specification Table:

Index Currency	Underlying Swap Currency	Tenor	BBG ticker	Start Date	Live Date
JPY	JPY	1y	NMRSR01T Index	09/12/2005	21/04/2021
JPY	JPY	2y	NMRSR02T Index	09/12/2005	21/04/2021
JPY	JPY	Зу	NMRSR03T Index	25/03/2009	21/04/2021
JPY	JPY	4y	NMRSR04T Index	10/08/2009	21/04/2021
JPY	JPY	5y	NMRSR05T Index	10/08/2009	21/04/2021
JPY	JPY	7у	NMRSR07T Index	10/08/2009	21/04/2021
JPY	JPY	10y	NMRSR10T Index	10/08/2009	21/04/2021
JPY	JPY	15y	NMRSR15T Index	10/08/2009	21/04/2021
JPY	JPY	20y	NMRSR20T Index	10/08/2009	21/04/2021
JPY	JPY	30y	NMRSR30T Index	10/08/2009	21/04/2021
GBP	GBP	1y	NMRSR01I Index	18/12/2000	04/02/2021
GBP	GBP	2y	NMRSR02I Index	18/12/2000	04/02/2021
GBP	GBP	3у	NMRSR03I Index	08/09/2008	04/02/2021
GBP	GBP	4y	NMRSR04I Index	08/09/2008	04/02/2021
GBP	GBP	5y	NMRSR05I Index	28/05/2008	04/02/2021
GBP	GBP	7у	NMRSR07I Index	08/09/2008	04/02/2021
GBP	GBP	10y	NMRSR10I Index	28/05/2008	04/02/2021
GBP	GBP	15y	NMRSR15I Index	08/09/2008	04/02/2021
GBP	GBP	20y	NMRSR20I Index	08/09/2008	04/02/2021
GBP	GBP	30y	NMRSR30I Index	03/06/2008	04/02/2021
USD	USD	1y	NMRSR01O Index	09/01/2007	07/01/2022
USD	USD	2y	NMRSR02O Index	09/01/2007	07/01/2022
USD	USD	3у	NMRSR03O Index	06/07/2010	07/01/2022
USD	USD	4y	NMRSR04O Index	09/01/2007	07/01/2022
USD	USD	5y	NMRSR05O Index	09/01/2007	07/01/2022
USD	USD	7у	NMRSR07O Index	09/01/2007	07/01/2022
USD	USD	10y	NMRSR10O Index	09/01/2007	07/01/2022
USD	USD	15y	NMRSR15O Index	26/09/2008	07/01/2022
USD	USD	20y	NMRSR20O Index	09/02/2009	07/01/2022
USD	USD	30y	NMRSR300 Index	26/09/2008	07/01/2022

# Instrument Specification Table:

Underlying Swap	Trading Time (London	FX Price Source (Reuters	FX Price Field
Currency	Time)	Screen)	

JPY	Snap Time	FX Rate	Price Field	
GBP				
	Snap Time	FX Rate	Price Field	

# Appendix B

Local<sup>k</sup> Calendar and Spot Date Convention for each Currency:

Underlying Swap Currency	Local Calendar	Spot Date - adjustment from current date
JPY	Tokyo	+2 Tokyo Bizdays
GBP	London	+0 London Bizday
USD	New York	+2 SIFMA Business Days

Swaps conventions for every tenors and swap currencies

Underlying Swap Currency	Tenor	Holiday Business Day	Floating Index	Floating Leg Pay Convention	Fixed Leg Pay Convention
JPY	1y	Tokyo	JPY-TONA-OIS- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
JPY	2y	Tokyo	JPY-TONA-OIS- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
JPY	3у	Tokyo	JPY-TONA-OIS- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
JPY	4y	Tokyo	JPY-TONA-OIS- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
JPY	5у	Tokyo	JPY-TONA-OIS- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
JPY	7y	Tokyo	JPY-TONA-OIS- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
JPY	10y	Tokyo	JPY-TONA-OIS- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
JPY	15y	Tokyo	JPY-TONA-OIS- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
JPY	20y	Tokyo	JPY-TONA-OIS- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
JPY	30y	Tokyo	JPY-TONA-OIS- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
GBP	1y	London	GBP-SONIA- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
GBP	2y	London	GBP-SONIA- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
GBP	Зу	London	GBP-SONIA- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
GBP	4y	London	GBP-SONIA- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
GBP	5y	London	GBP-SONIA- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
GBP	7y	London	GBP-SONIA- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
GBP	10y	London	GBP-SONIA- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
GBP	15y	London	GBP-SONIA- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
GBP	20y	London	GBP-SONIA- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
GBP	30y	London	GBP-SONIA- COMPOUND	Annually, Act/365f, Modified Following	Annually, Act/365f, Modified Following
USD	1y	New York	USD-SOFR- COMPOUND	Annually, Act/360, Modified Following	Annually, Act/360, Modified Following
USD	2y	New York	USD-SOFR- COMPOUND	Annually, Act/360, Modified Following	Annually, Act/360, Modified Following

USD	3y	New York	USD-SOFR-	Annually, Act/360,	Annually, Act/360,
UGD	Зу		COMPOUND	Modified Following	Modified Following
USD	4y	New York	USD-SOFR-	Annually, Act/360,	Annually, Act/360,
000			COMPOUND	Modified Following	Modified Following
USD	F	New York	USD-SOFR-	Annually, Act/360,	Annually, Act/360,
090	5у		COMPOUND	Modified Following	Modified Following
USD	7у	New York	USD-SOFR-	Annually, Act/360,	Annually, Act/360,
000			COMPOUND	Modified Following	Modified Following
LICD	10y	New York	USD-SOFR-	Annually, Act/360,	Annually, Act/360,
USD			COMPOUND	Modified Following	Modified Following
USD	15y	New York	USD-SOFR-	Annually, Act/360,	Annually, Act/360,
			COMPOUND	Modified Following	Modified Following
USD	20y	New York	USD-SOFR-	Annually, Act/360,	Annually, Act/360,
			COMPOUND	Modified Following	Modified Following
USD	30y	New York	USD-SOFR-	Annually, Act/360,	Annually, Act/360,
			COMPOUND	Modified Following	Modified Following

# Appendix C

# Backtest parameters of the Yield Curve methodology

Before January 2014 for JPY, GBP and October 2019 for USD, the yield curve for each Currency is built using Nomura proprietary yield curve interpolation methodology, using Bloomberg end of day levels: please see the table below for ticker details.

## Cash Rates:

If the cash rate is unavailable for a particular day then the missing Instrument level will be taken from the previous level published.

# Swap Rates:

The source of the Swap Rates from Bloomberg follows the hierarchy: BGN, CMPL, CMPN (i.e. if the source BGN is not available then source CMPL is used and if source CMPL is not available then source CMPN is used). Following this If a swap rate, for a currency and tenor that appears in the Index Specification Table, is unavailable for a particular day then the missing Instrument level will be taken from the previous level published.

From the January 2014 for JPY, GBP and October 2019 for USD, the yield curve for each Currency is built using Nomura proprietary Yield Curve interpolation methodology as defined in the NIP Indices Yield Curve Process document dated September 2020 (as amended and/or supplemented from time to time and published on the Nomura QIS Website).

The following data is not used in the construction in the yield curves:

BPSWS4 BGN Curncy - 27/01/2011, 03/02/2011, 09/02/2011

BPSWS5 BGN Curncy - 03/02/2011, 04/02/2011

SOFRRATE Index - 17/09/2019. Level as of previous day is used

# JPY Curve Instruments before January 2014:

[description of Price Levels used]Instrument	Bloomberg ticker	Bloomberg source used From (including) – To (excluding)

GBP Curve Instrumen	ts before January 2014:	
[description of Price Levels used]Instrument	Bloomberg ticker	Bloomberg source used From (including) – To (excluding)
USD Curve Instrument	ts before October 2019:	
[description of Price Levels used]Instrument	Bloomberg ticker	Bloomberg source used From (including) – To (excluding)
	1	

<sup>\*</sup>Prior to April 2018, FED is used as overnight rate. From and including 2<sup>nd</sup> April 2018, SOFR is used as overnight rate

# FX Data Sources & Backtest assumptions:

# Prior to 01 January 2014:

Currency	Used from	End Date	Price Source [EOD Bloomberg]	Field
GBP			Price Source	Field
JPY			Price Source	Feild

If for any Index Business day t the FX Rate for any CCY is not available from Bloomberg, the latest FX rate will be used for this day.

### Disclaimer

This material has been prepared by the Index Sponsor, NIP ("**NIPIC**"), which is authorised by the Prudential Regulation Authority (PRA), regulated by the Financial Conduct Authority (FCA) and the PRA in the UK, and is a member of the London Stock Exchange.

NIplc has been registered as a Benchmark Administrator by the FCA pursuant to UK BMR and has accordingly been listed on the FCA Register of Benchmark Administrators.

This material is made available to you by NIplc and/or its affiliates (collectively, "Nomura Group"), as the case may be. This is not investment research as defined by the US rules and regulations, FCA nor is it research under the applicable rules in Hong Kong. It does not constitute a personal recommendation, as defined by the FCA, or take into account the particular investment objectives, financial situations, or needs of individual investors. It is intended only for investors who are "eligible market counterparties" or "professional clients" as defined by the FCA, and may not, therefore, be redistributed to other classes of investors. This material does not fall within the definition of an analyst report as defined by the Japan Securities Dealer's Association. It is intended for professional and institutional investors only.

This material is: (i) for your private information only, and we are not soliciting any action based upon it; (ii) not to be construed as an offer to sell or a solicitation of an offer to buy any security in any jurisdiction where such offer or solicitation would be illegal; and (iii) is based upon information that we consider reliable, and it should not be relied upon as such. While all reasonable care has been taken to ensure that the information contained herein is not untrue or misleading at the time of publication, no representation, warranty or undertaking, expressed or implied, is made and no responsibility or liability is accepted by the Nomura Group and/or its directors, officers and employees as to the accuracy, completeness, merchantability or fitness for a particular purpose of the information contained herein or any other information provided by any other person in connection with the information described herein or their distribution or for the results obtained from the use of this information.

Nomura Group and/or its directors, officers and employees do not accept any liability whatsoever for any loss or damage (including, without limitation, direct, indirect or consequential loss or loss of profits or loss of opportunity) suffered by you or any third party in connection with the use of this material or its content. It is not intended for investors who are unfamiliar with the relevant markets or who are unwilling or unable to bear the risks associated with the investment. You should refrain from entering into any transaction unless you fully understand all the risks involved and you have independently determined that the investment is suitable for you. We are not your designated investment adviser.

In reaching a determination as to the appropriateness of any proposed transaction linked to the Index, clients should undertake a thorough independent review of the legal, regulatory, credit, tax, accounting and economic consequences of such action. The Nomura Group may from time to time perform investment banking or other services (including acting as advisor, manager or lender) for, or solicit investment banking or other business from, companies mentioned herein. Further, the Nomura Group, and/or its officers, directors and employees, including persons, without limitation, involved in the preparation or issuance of this material may, from time to time, have long or short positions in, and buy or sell, the securities, or in options, futures or other derivatives based thereon, of companies mentioned herein, or related securities or in options, futures or other derivative instruments based thereon. In addition, the Nomura Group may act as a market maker and principal, willing to buy and sell certain of the securities or in options, futures or other derivatives of companies mentioned herein. Further, the Nomura Group may buy and sell certain securities or in options, futures or other derivatives of companies mentioned herein, as agent for its clients.

Nomura manages conflicts identified through the following: their Chinese wall, confidentiality and independence policies, maintenance of a Stop List and a Watch List, personal account dealing rules, policies and procedures for managing conflicts of interest arising from the allocation and pricing of securities and impartial investment research and disclosure to clients via client documentation. Disclosure information is available at <a href="http://www.nomura.com/research/">http://www.nomura.com/research/</a>. No part of this material may be (i) copied, photocopied, or duplicated in any form, by any means, or (ii) redistributed without our prior express consent. If this publication has been distributed by electronic transmission, such as e-mail, then such transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this publication, which may arise as a result of electronic transmission. If verification is required, please request a hard-copy version

Nomura International (Hong Kong) Limited ("NIHK"), is regulated by the Securities and Futures Commission under Hong Kong laws which differ from Australian laws. Neither Niplc nor NIHK hold an Australian financial services license as both are exempt from the requirements to hold this license in respect of the financial services either provides.

If distributed into the US, the following section will also apply to US clients:

Nomura Securities International, Inc, ("NSI") is regulated by the Securities and Futures Commission and a member of SIPC. NSI does not provide legal, accounting or tax advice. In compliance with Internal Revenue Service Circular 230, we hereby notify you that any discussion of tax matters set forth herein was written in connection with the promotion or marketing of the matters described herein and was not intended or written to be used, and cannot be used by any person, for the purposes of avoiding tax-related penalties under federal, state or local tax law. Each person should seek legal, accounting and tax advice based on its particular circumstances from independent advisors.