



IHS Markit™

# iBoxx Standardized TRS Trading Convention Guide

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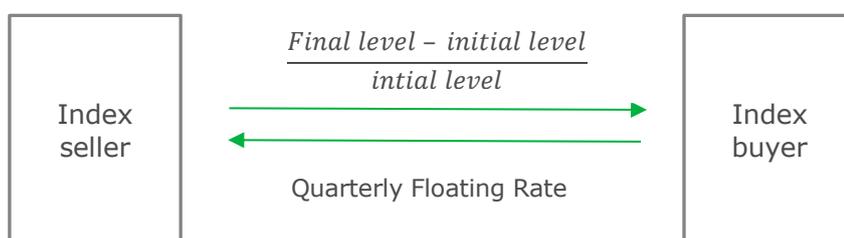
## 1. iBoxx Standardized TRS Overview

iBoxx Standardized Total Return Swaps (TRS) offer the possibility to take a synthetic long or short position on iBoxx indices. The index buyer, i.e., long position on the index, receives the total return of the index referenced in the trade, which is paid out at maturity. In return, the index buyer pays the index seller the funding cost (Coupon Amount) on a quarterly basis until the contract maturity. The Coupon Amount is based on the funding rate, i.e., Floating Rate Option, and is paid on each International Monetary Market Date (IMM), following the IMM credit market convention.

iBoxx Standardized TRS contracts enable investors to gain or hedge exposure to the bond and leveraged loan markets easily and efficiently. They benefit from providing zero-tracking error to the underlying index and from strong liquidity due to their standardized trading structure. iBoxx Standardized TRS utilize standard trading documentation, including Standard Terms Supplement and Confirmation documents. The trading documentation reference the 2006 ISDA Definitions and can be electronically confirmed via MarkitSERV.

## 2. Trade Mechanics

### 2.1. Cash flow cycle



As shown in the above diagram, the index buyer receives the index performance at maturity, and pays the funding rate on a quarterly basis during the life of the contract. For trades that exceed one IMM quarter, the funding rate may be different for each quarter. The dealer quotes the initial level (live bid/offer) of the index, while the final level is the official closing index level on the maturity date of the TRS contract.

### 2.2. Maturity dates

iBoxx Standardized TRS contracts trade with set maturity dates, which are business day-adjusted IMM dates – 20<sup>th</sup> Mar/Jun/Sep/Dec. Contracts are traded with set 3-month maturity intervals. The 3-month contract is the shortest dated contract and references the next IMM date, which means the 3M contract always has 3 months or less in maturity. Common maturities that are quoted are 3, 6, 9, and 12 months.

For example, on 25<sup>th</sup> March 2021, a market maker may send iBoxx Standardized TRS quotes for the following four different contracts on the *iBoxx USD Liquid High Yield Index* as per below:

Maturity Date	Bid / Ask
Jun-2021	317.575 / 318.495
Sep-2021	317.111 / 318.671
Dec-2021	316.899 / 318.767
Mar-2022	316.575 / 319.013

## 2.3. Full first coupon

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iBoxx Standardized TRS contracts trade with a full first coupon convention, which allows trade fungibility and simplified coupon processing. The following trading documents support the full first coupon convention in iBoxx Standardized TRS contracts:

- Standard Terms Supplement (February 2015) – Full First Coupon
- Confirmation February (February 2015) – Full First Coupon

Under the full first coupon convention, all funding rate payments made by index buyers are for the entire IMM quarter, regardless of when the trade is executed within the initial IMM quarter. In the IMM quarter in which the trade is struck, an upfront payment is made by the index seller to the index buyer to compensate for the funding rate overpayment that the index buyer will make at the end of the initial period. This initial payment is equal to the accrued from the starting IMM date of the initial quarter through to the effective date.

## 3. Funding Rates

### 3.1. LIBOR Transition - Background

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Since the inception of iBoxx Standardized TRS in 2012, the applicable quarterly funding rates in the contracts has been the 3M LIBOR/EURIBOR rate for the respective underlying currency. Due to the transition away from LIBOR, the iBoxx Standardized TRS, which are administered by IHS Markit, will require changes in the trade mechanics specifically for the calculation of the funding leg in a Standardized iBoxx TRS contract that uses the LIBOR as the Floating Rate Option. This will have implications in the calculation of upfront and unwind amounts at the beginning and closing out of trades.

iBoxx Standardized TRS trades are governed by a Confirmation and a Standard Terms Supplement which incorporate by reference the definitions and provisions included in ISDA's 2006 Definitions. With the impending cessation of the various IBORs, iBoxx Standardized TRS will undergo the following changes:

- Alternative rates will be selected that can be used as the Floating Rate Options for iBoxx Standardized TRS trades.
- For legacy and new iBoxx Standardized TRS trades that continue to reference the IBORs, a fallback mechanism is in place for adhering parties once the IBORs are ceased or deemed non-representative by the regulatory authorities.

### 3.2. Conventions

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While the below trading conventions are broadly accepted market standards in trading iBoxx Standardized TRS, they are not contractually binding. The iBoxx Standardized TRS trades are governed by a Confirmation and a Standard Terms Supplement which allow counterparties to select whichever funding rates they prefer.

iBoxx Standardized TRS is currently available on underlying indices that are denominated in EUR, GBP and USD currencies. The full list of underlying indices is provided in the Appendix. As the administration and regulatory bodies for each of the currencies operate in separate jurisdictions, there are differences in the Floating Rate Options to be used for the funding component of the respective iBoxx Standardized TRS contracts.

The funding leg of a Standardized iBoxx TRS contract involves quarterly coupon payments referencing the Floating Rate Option as specified in the relevant Confirmation.

### **Prior to 20<sup>th</sup> December 2021**

Commonly, the 3M LIBOR/EURIBOR is chosen as the Floating Rate Option to calculate the funding leg of an iBoxx Standardized TRS contract and the currency of the LIBOR depends on the currency of the underlying index being referenced by the Standardized iBoxx TRS contract.

- ***Standardized TRS on iBoxx EUR indices***

The funding leg for Standardized TRS on iBoxx EUR indices commonly use the 3M EURIBOR, which is administered by European Money Markets Institute (EMMI) and authorized under EU Benchmarks Regulation (BMR).

- ***Standardized TRS on iBoxx GBP indices***

The funding leg for Standardized TRS on iBoxx GBP indices commonly use the 3M GBP LIBOR, which is administered by ICE Benchmark Administration (IBA) and authorized under UK FCA.

- ***Standardized TRS on iBoxx USD indices***

The funding leg for Standardized TRS on iBoxx USD indices commonly use the 3M USD LIBOR, which is administered by ICE Benchmark Administration (IBA) and authorized under UK FCA.

### **From 20<sup>th</sup> December 2021 onward**

The following are the conventions for the Floating Rate Option for each of the currencies of the underlying index being referenced by the Standardized iBoxx TRS contract:

- ***Standardized TRS on iBoxx EUR indices***

The 3M EURIBOR is expected to continue to be published for the foreseeable future, and Standardized TRS on iBoxx EUR indices will continue to use the 3M EURIBOR as the Floating Rate Option.

- ***Standardized TRS on iBoxx GBP indices***

The SONIA compounded-in-arrears rate will be used as the Floating Rate Option for the relevant IMM periods. For this purpose, the SONIA Compounded Index published by the Bank of England will be used to determine the applicable SONIA compounded-in-arrears rate for the quarterly coupons, upfront and unwind amounts.

The SONIA Compounded Index [methodology](#) and the [historical data](#) can be accessed via the Bank of England website.

- ***Standardized TRS on iBoxx USD indices***

The SOFR compounded-in-arrears rate will be used as the Floating Rate Option for the relevant IMM periods. For this purpose, the SOFR Index published by the Federal Reserve will be used to determine the applicable SOFR compounded-in-arrears rate for quarterly coupons, upfront and unwind amounts.

The SOFR Index [methodology](#) and the [historical data](#) can be accessed via the Federal Reserve website.

### 3.3. Summary

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The table below summarizes the conventions for the Floating Rate Option used to calculate the funding leg of iBoxx Standardized TRS contracts.

iBoxx Standardized TRS underlying index currency	Prior to 20 <sup>th</sup> December 2021	From 20 <sup>th</sup> December 2021 onward
EUR	3M EURIBOR	3M EURIBOR
GBP	3M GBP LIBOR	SONIA Compounded-in-arrears
USD	3M USD LIBOR	SOFR Compounded-in-arrears.

## 4. Fallback Mechanism for IBOR cessation

For cases where IBORs are used in new and legacy iBoxx Standardized TRS trades prior to their cessation, a fallback mechanism has been put in place in the event that the IBORs are ceased or deemed non-representative by the respective regulatory authorities. This fallback mechanism is built into the ISDA's 2020 Supplement, which has been applicable since 25<sup>th</sup> January 2021.

### 4.1. ISDA's 2020 Supplement

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ISDA has published a 2020 Supplement to their 2006 Definitions in October 2020. For purposes of Standardized iBoxx TRS, this Supplement provides the following three cessation **Trigger Events** to initiate the fallback to a Risk-Free Rate (RFR) adjusted rate published by Bloomberg:

- A public statement or publication of information by or on behalf of the administrator of the Applicable Rate announcing that it has ceased or will cease to provide the Applicable Rate permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the Applicable Rate;
- A public statement or publication of information by the regulatory supervisor for the administrator of the Applicable Rate, the central bank for the currency of the Applicable Rate, an insolvency official with jurisdiction over the administrator for the Applicable Rate, a resolution authority with jurisdiction over the administrator for the Applicable Rate or a court or an entity with similar insolvency or resolution authority over the administrator for the Applicable Rate, which states that the administrator of the Applicable Rate has ceased or will cease to provide the Applicable Rate permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the Applicable Rate; or
- If the Applicable Rate is Sterling LIBOR, Swiss Franc LIBOR, U.S. Dollar LIBOR, Euro LIBOR or Yen LIBOR only, a public statement or publication of information by the regulatory supervisor for the administrator of such Applicable Rate announcing that (A) the regulatory supervisor has determined that such Applicable Rate is no longer, or as of a specified future date will no longer be, representative of the underlying market and economic reality that such Applicable Rate is intended to measure and that representativeness will not be restored and (B) it is being made in the awareness that the statement or

publication will engage certain contractual triggers for fallbacks activated by pre-cessation announcements by such supervisor (howsoever described) in contracts. The first two bullet points above relate to permanent cessation, and the third bullet point above is the 'pre-cessation' trigger.

More information can be found on ISDA's website [here](#).

## 4.2. Fallback Rate Methodology

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Bloomberg publishes the "all-in" RFR adjusted rates to account for:

1. The fact that RFRs are overnight rates without a term structure
2. The historical spread differential between LIBORs and the respective RFR compounded rates.

The fallback rate will be compounded in arrears to align with the 3M tenor for Standardized iBoxx TRS funding component. It will also incorporate a spread adjustment, using a five-year median comparison calculation between the relevant 'compounded in arrears' RFR and LIBOR.

The fallback rates applicable for the Standardized iBoxx TRS contracts will be based on the respective iBoxx index currencies as shown below:

iBoxx Index Currency	IBOR Funding Rate	Fallback RFR	Fallback Tenor	IBOR Fallback Bloomberg Ticker
EUR	3M EURIBOR	ESTR	3M	FEUR0003M
GBP	3M GBP LIBOR	SONIA	3M	FBP0003M
USD	3M USD LIBOR	SOFR	3M	FUS0003M

More information can be found on Bloomberg's website [here](#).

## 4.3. Impact on new and legacy trades

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### New Trades

ISDA launched the 2020 Supplement on 23<sup>rd</sup> October 2020, which have been effective from 25<sup>th</sup> January 2021 onward. As noted earlier, the 2020 Supplement for the 2006 ISDA Definitions include the new cessation triggers and fallback provisions.

All new Standardized iBoxx TRS contracts entered **on or after the Effective Date of the 2020 Supplement** will include the amended floating rate option i.e. the floating rate option with the fallback (counterparties will not have to take any additional steps).

As mentioned above, the floating rate option with the fallback rates will only be applicable once one of the Trigger Events have occurred.

### Legacy/Existing Trades

Counterparties with existing contracts executed before the new Standard Terms Supplement will need to adhere to a planned protocol by ISDA to align with the terms of the new Standard Terms Supplement. Any existing Standardized iBoxx TRS contract where one or both counterparties decline to adhere to the protocol will require bilateral settlement upon occurrence of the Trigger Events.

## 5. Upfront/unwind and Coupon calculus

The upfront/unwind amount i.e. Accrued Amount at the time of entering into a new trade or closing out a trade is calculated as:

If *Trade Date*  $\neq$  *Final Fixing Date*:

$$\text{Accrued Amount} = \text{Notional} * \text{Accrued Floating Rate} * \frac{\text{Effective Date} - \text{IMM Period Start Date}}{y}$$

If *Trade Date* = *Final Fixing Date*:

$$\text{Accrued Amount} = \text{Notional} * \text{Coupon Floating Rate} * \frac{\text{Effective Date} - \text{IMM Period Start Date}}{y}$$

The Coupon Amount for any IMM period that is not the last IMM period of the swap is calculated as:

$$\text{Coupon Amount} = \text{Notional} * \text{Coupon Floating Rate} * \frac{\text{IMM Period End Date} - \text{IMM Period Start Date}}{y}$$

The Coupon Payment for an IMM period that is the last IMM period of the swap is calculated as:

$$\text{Coupon Amount} = \text{Notional} * \text{Coupon Floating Rate} * \frac{\text{IMM Period End Date} - \text{IMM Period Start Date} + 1}{y}$$

Index Currency	Annual Days (y)
GBP	365
EUR	360
USD	360

Finally, the index buyer's trade value (TV) of the contract at maturity (Final Fixing Date) is calculated as:

$$\text{TV at Final Fixing Date} = \text{Notional} * \left( \frac{\text{Index Level at Final Fixing Date}}{\text{Index Level at Entry Date}} - 1 \right)$$

However, if the contract is unwound prior to maturity of the contract, the index buyer's trade value (TV) of the contract at unwind trade date is calculated as:

$$\text{TV at Unwind Trade Date} = \text{Notional} * \left( \frac{\text{Index Level at Unwind Trade Date}}{\text{Index Level at Entry Date}} - 1 \right) - \text{Accrued Amount}$$

### 5.1. Forward-looking Floating Rate Option

When the Floating Rate Option is a forward-looking term rate such as LIBOR, then:

$$\text{Coupon Floating Rate} = \text{Accrued Floating Rate} = 3M \text{ Libor/Euribor (as per fixing convention)}$$

The LIBOR/EURIBOR fixing convention is:

**Index Currency Forward-looking term rate publication used**

EUR	3M EURIBOR as of IMM Period Start Date minus 2 Business Days
GBP	3M GBP LIBOR as of IMM Period Start Date
USD	3M USD LIBOR as of IMM Period Start Date minus 2 Business Days

**5.2. Compounded-in-arrears Floating Rate Option**

When the Floating Rate Option is a compounded-in-arrears Risk Free Rate based on SOFR or SONIA, then:

$$\text{Coupon Floating Rate} = \left( \frac{RFR\ Index_{IMM\ Period\ End\ Date-2\ Business\ Days}}{RFR\ Index_{IMM\ Period\ Start\ Date-2\ Business\ Days}} - 1 \right) * \frac{y}{d_C}$$

where  $d_C = (IMM\ Period\ End\ Date - 2\ Business\ Days) - (IMM\ Period\ Start\ Date - 2\ Business\ Days)$ .

$$\text{Accrued Floating Rate} = \left( \frac{RFR\ Index_{Trade\ Date-1\ Business\ Day}}{RFR\ Index_{IMM\ Period\ Start\ Date-2\ Business\ Days}} - 1 \right) * \frac{y}{d_A}$$

where  $d_A = (Trade\ Date - 1\ Business\ Day) - (IMM\ Period\ Start\ Date - 2\ Business\ Days)$ .

Index Currency	RFR Index	Annual Days (y)
GBP	SONIA Compounded Index (IUDZOS2)	365
USD	SOFR Index (SOFRAI)	360

## 6. Glossary

Accrued Amount	Initial Payment Amount as specified in the Confirmation
Business Days	London and TARGET2 for GBP and EUR; New York for USD.
Coupon Amount	Quarterly amounts based on the Floating Rate Option
Effective Date	Trade Date + 1 Calendar Day
Day Count Convention	ACT/360 for EUR and USD, ACT/365 for GBP
Floating Rate Option	Relevant funding rate as specified in the Confirmation
Final Fixing Date	Specified in the trade confirmation. IMM date on which the trade pay-out is determined
Floating rate accrued for any IMM period that is not the last IMM period of the swap	IMM date (inclusive) to IMM date (exclusive)
Floating rate accrued for IMM period that is the last IMM period of the swap	IMM date (inclusive) to IMM date (inclusive)
IMM Period Start Date	Start date of the relevant IMM Period
IMM Period End Date	End date of the relevant IMM Period
Index Level	Index level of the index underlying to the iBoxx Standardized TRS contract
Quarterly IMM Dates	Mar/Jun/Sep/Dec 20 <sup>th</sup> or the following Business Day
Trade Date	Date on which trade is agreed

Further details of relevant terms of the contract are defined in the iBoxx Standardized TRS Standard Terms Supplement and Confirmation which is available for download from the iBoxx TRS website at:

<https://www.markit.com/Documentation/Product/IBoxx> > Tradable – Standardized TRS

## 7. Appendix

List of indices currently available for iBoxx Standardized TRS:

iBoxx Index	ISIN	Ticker	RED ID
iBoxx EUR Contingent Convertible Liquid Developed Market AT1	GB00BQY78372	IBXXC2D1	4J624GAA3
iBoxx USD Contingent Convertible Liquid Developed Market AT1	GB00BQY78F97	IBXXC1D1	4J624DAA0
iBoxx EUR Corporates	DE0006301161	QW5A	4J623OAA7
iBoxx EUR Liquid High Yield	GB00B57G6H43	IBOXXMJA	4J623RAA0
iBoxx GBP Corporates	DE0005993174	IYDU	4J623NAA9
iBoxx USD Liquid High Yield	GB00B4K07738	IBOXHY	4J623JAA8
iBoxx USD Liquid Investment Grade	GB00B4K4X773	IBOXIG	4J622TAA7
iBoxx USD Liquid Leveraged Loans	GB00B4Q2XT74	IBXXLLTR	4J623WAA9
iBoxx USD Liquid High Yield Oil & Gas (5/25/50 Issuer Cap)	GB00BZ1NN361	IBXXLOG1	4J624NAA8
iBoxx USD Liquid Investment Grade 10+ Index	GB00BN56M180	IBXXLIG1	4J624PAA3
iBoxx USD Emerging Markets Sovereigns & Sub-Sovereigns Capped	GB00BD05BC41	IBXXEM11	4J625JAA6
iBoxx USD Liquid Investment Grade BBB 0+	GB00BL09SP43	IBXXUQ0T	4J625PAA2

## 8. Further Information

For any queries, please email [indices@ihsmarkit.com](mailto:indices@ihsmarkit.com):

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