SUBMISSION COVER SHEET

***IMPORTANT*: Check box if Confidential Treatment is requested** ☐

Registered Entity Identifier Code (optional): 22-389 (1 of 2)

Organization: Chicago Mercantile Exchange Inc. ("CME")

Filing as a: ☒ **DCM** ☐ **SEF** ☐ **DCO** ☐ **SDR**

Please note - only ONE choice allowed.

Filing Date (mm/dd/yy): 10/07/22 Filing Description: Initial Listing of the Euro Short-Term Rate (€STR) Futures and Euro Short-Term Rate (€STR) Three-Month Single Contract Basis Spread Futures Contracts

SPECIFY FILING TYPE

Please note only ONE choice allowed per Submission.

Organization Rules and Rule Amendments

☐	Certification	§ 40.6(a)
☐	Approval	§ 40.5(a)
☐	Notification	§ 40.6(d)
☐	Advance Notice of SIDCO Rule Change	§ 40.10(a)
☐	SIDCO Emergency Rule Change	§ 40.10(h)

Rule Numbers:

New Product **Please note only ONE product per Submission.**

☒	Certification	§ 40.2(a)
☐	Certification Security Futures	§ 41.23(a)
☐	Certification Swap Class	§ 40.2(d)
☐	Approval	§ 40.3(a)
☐	Approval Security Futures	§ 41.23(b)
☐	Novel Derivative Product Notification	§ 40.12(a)
☐	Swap Submission	§ 39.5

Product Terms and Conditions (product related Rules and Rule Amendments)

☐	Certification	§ 40.6(a)
☐	Certification Made Available to Trade Determination	§ 40.6(a)
☐	Certification Security Futures	§ 41.24(a)
☐	Delisting (No Open Interest)	§ 40.6(a)
☐	Approval	§ 40.5(a)
☐	Approval Made Available to Trade Determination	§ 40.5(a)
☐	Approval Security Futures	§ 41.24(c)
☐	Approval Amendments to enumerated agricultural products	§ 40.4(a), § 40.5(a)
☐	"Non-Material Agricultural Rule Change"	§ 40.4(b)(5)
☐	Notification	§ 40.6(d)

Official Name(s) of Product(s) Affected:

Rule Numbers:

Christopher Bowen
Managing Director and Chief Regulatory Counsel
Legal Department

October 7, 2022

VIA ELECTRONIC PORTAL

Mr. Christopher J. Kirkpatrick
Office of the Secretariat
Commodity Futures Trading Commission
3 Lafayette Center
1155 21st Street NW
Washington, DC 20581

Re: CFTC Regulation 40.2(a) Certification. Initial Listing of the Euro Short-Term Rate (€STR) Futures and Euro Short-Term Rate (€STR) Three-Month Single Contract Basis Spread Futures Contracts.
CME Submission No. 22-389 (1 of 2)

Dear Mr. Kirkpatrick:

Chicago Mercantile Exchange Inc. ("CME" or "Exchange") is certifying to the Commodity Futures Trading Commission ("CFTC") the initial listing of the Euro Short-Term Rate (€STR) Futures and Euro Short-Term Rate (€STR) – Three-Month Single Contract Basis Spread Futures contracts (the "Contracts") for trading on the CME Globex electronic trading platform ("CME Globex") and for submission for clearing on CME ClearPort effective Sunday, October 30, 2022 for trade date Monday, October 31, 2022.

Contract Title	CME Rulebook Chapter	CME Globex and CME ClearPort Code
Euro Short-Term Rate (€STR) Futures	480	ESR
Euro Short-Term Rate (€STR) Three-Month Single Contract Basis Spread Futures	481	EUS

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Section 1 – Contract Specifications

Contract Title	**Euro Short-Term Rate (€STR) Futures**	**Euro Short-Term Rate (€STR) Three-Month Single Contract Basis Spread Futures**
Rulebook Chapter	480	481
Commodity Code	ESR	EUS
Trading Unit	Interest based on the compounded daily Euro Short-Term Rate ("€STR"), such that each basis point per annum of interest = €25 euro per contract	Prices shall be quoted as the value of the spread between the expected 3-month Euribor benchmark rate and the expected compounded overnight €STR benchmark rate over the same interest period, expressed as an interest rate per annum such that each basis point per annum of interest shall be worth €25
Price Basis	Contract-grade IMM Index: 100 minus R where: R = Compounded daily €STR during the contract Reference Quarter, defined as the interval that ends on (and does not include) the third Wednesday of the contract delivery month (IMM Wednesday) and begins on (and includes) the third Wednesday of the third calendar month preceding the contract delivery month, based on TARGET2 good business days. Example: Contract price of 97.2800 IMM Index points signifies R = 2.7200 percent per annum	For daily settlement, prices shall be quoted as the value of the spread between the expected 3-month Euribor benchmark rate and the expected compounded overnight €STR benchmark rate. Final settlement price, occurring 2 TARGET2 business days prior to the third Wednesday of the expiring contract month (IMM Wednesday), shall be equal to the daily settlement price of 3 TARGET2 business days prior to IMM Wednesday. Assignment price into €STR contract (ESR) of same contract named month shall be at 100 minus the 3-Month Euribor, on the final settlement date, plus the final settlement price. For instance, if 3-Month Euribor on the Monday 2 days before IMM Wednesday is 0.7600 percent per annum and the spread settlement on the same day is 0.4500, assignment price will be at the IMM Index value of 99.6900 (100-0.7600+0.4500).
Contract Size	€2500 x contract-grade IMM Index	
Minimum Price Increment	Nearest expiring contract month: .000125 IMM Index Points (0.125 basis point per annum) equal to €3.125 per contract Second nearest expiring contract month: 0.0025 IMM Index points (0.25 basis point per annum) equal to €6.25 per contract All other expiring contract months: 0.005 IMM Index points (0.5 basis point per annum) equal to €12.50 per contract	For all contracts: 0.0025 IMM Index points (0.25 basis point per annum) equal to €6.25 per contract
Listing Schedule	Nearest 8 Quarterly months (Mar, Jun, Sep, Dec), nearest 2 serial months, and 3 contract months in the accrual period Initial listed month: August 2022	Nearest 8 Quarterly months (Mar, Jun, Sep, Dec) and nearest 2 serial months Initial listed month: November 2022
Termination of Trading	4:00 p.m. London time on the TARGET2 business day immediately preceding the third Wednesday three months forward from the expiring contract month	11:00 a.m. Central European Time 2 TARGET2 business days immediately preceding the third Wednesday of the expiring contract month
Delivery	By cash settlement in euro, by reference to Final Settlement Price, on last day of trading. **Final Settlement Price**: Contract-grade IMM Index 100 minus R where: R = Compounded daily €STR during the contract Reference Quarter, defined as the interval that	By assignment into €STR contract (ESR) of same contract named month at 100 minus the 3-Month Euribor, on the final settlement date, plus the final settlement price

	ends on (and does not include) the third Wednesday of the contract delivery month (IMM Wednesday) and begins on (and includes) the third Wednesday of the third calendar month preceding the contract delivery month, based on TARGET2 good business days.	
Trading and Clearing Hours	**CME Globex Pre-Open**: Sunday: 4:00 p.m.-5:00 p.m. Central Time (CT) Monday-Thursday: 4:45 p.m.- 5:00 p.m. CT **CME Globex**: Sunday - Friday 5:00 p.m.-4:00 p.m. CT with a 60-minute break each day beginning at 4:00 p.m. CT **CME ClearPort**: Sunday 5:00 p.m. - Friday 5:45 p.m. CT with no reporting Monday – Thursday from 5:45 p.m. – 6:00 p.m. CT	
Block Trade Minimum Threshold	100 contracts - subject to reporting window: 5 minutes RTH / 15 minutes ATH and ETH	
CME Globex Matching Algorithm	A-Allocation	

Section 2 – Overview of €STR and Euribor Indexes

Section 2.1 – €STR

Index Overview

Euro Short-Term Rate ("€STR") measures overnight, unsecured lending rates between financial institutions across the euro area ("euro area" refers to the 19 European Union member states that have also adopted the euro as their currency). €STR is published daily by the European Central Bank ("ECB") at 8:00 a.m. Central European Time and is based on transactions settled on the previous business day and is thus an in-arrears benchmark rate. The ECB does not charge for access to €STR, nor does it license its use; as such, there is no information agreement in place between the ECB and CME. This arrangement is similar to CME products such as SOFR futures and Federal Funds Rate futures, which are based on reference rates published by other central banks such as the U.S. Federal Reserve.

€STR was published for the first time on October 2, 2019 and was designed as a replacement for the Euro Overnight Index Average ("EONIA"). EONIA – which was also an overnight, unsecured benchmark rate – solely measured interbank lending and was too heavily concentrated toward a small number of contributors as underpinning volume fell over time. This led to EONIA falling out of compliance with EU Benchmarks Regulations ("BMR").

The ECB had anticipated that EONIA would no longer be BMR compliant and sought to create a reference rate that was based on robust transaction data with large underpinning volume, and thus in line with BMR and IOSCO Principles for Financial benchmarks.

Since its inception, €STR's daily average transaction volume has been €44,653,000,000; its average transaction count 482; and average number of banks contributing data has been 30.

Given its common use as a reference rate, €STR is also established as an underlying index for derivative contracts, with ICE Futures Europe offering a One Month €STR Index futures contract.

Methodology

€STR is exclusively based on borrowing transactions in euro conducted with financial counterparties that banks report in accordance with Regulation (EU) No 1333/2014 (MMSR Regulation), the concepts and definitions of which underlie the €STR conceptual framework. Out of the potential MMSR instrument categories, €STR is calculated using overnight unsecured fixed rate deposit transactions over € 1 million. Unsecured deposits are standardized and are the most frequent means of conducting arm's length transactions on the basis of a competitive procedure, thereby limiting idiosyncratic factors potentially influencing the volatility of the rate.

€STR is calculated for each business day according to the EU TARGET2 calendar as a volume weighted trimmed mean rounded to the third decimal. TARGET2 refers to the EU-wide business day calendar.

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Calculation

The volume-weighted trimmed mean is calculated by:

1. Ordering transactions from the lowest rate to the highest rate;
2. Aggregating the transactions occurring at each rate level;
3. Removing the top and bottom 25% in volume terms; and
4. Calculating the mean of the remaining 50% of the volume-weighted distribution of rates. A pro rata calculation is applied to volumes that span the thresholds for trimming to ensure that exactly 50% of the total eligible volume is used in the calculation of the volume-weighted mean.

Data Integrity

As €STR is affiliated with the ECB and the European Union, it is supported by an extensive review framework. According to the ECB:

- €STR is governed by the €STR Guideline. The Guideline establishes the ECB's responsibility for the administration and oversight of the €STR and the tasks and responsibilities of the ECB and Eurosystem national central banks with respect to their contribution to the €STR determination process and related procedures.

- The Guideline also establishes a control framework to protect the integrity and independence of the determination process and to deal with any existing or potential conflicts of interest identified. This control framework also refers to the ECB's and the Eurosystem's common corporate ethical culture as embedded in the ECB Ethics framework (which applies to all ECB staff), the ethical standards for all central banks of the Eurosystem (Eurosystem Guideline), established by the Governing Council, and the Code of Conduct for high-level ECB officials.

- All these instruments establish ethical principles, rules and procedures for the identification, reporting, disclosure, management, mitigation and avoidance of conflicts of interest in relation to all Eurosystem tasks, including all tasks related to the €STR. Further details on how the framework is implemented at the ECB are provided on the Ethics – working with integrity webpage.

- The €STR Guideline further establishes a €STR Oversight Committee. The €STR Oversight Committee reviews, challenges and reports on all aspects of the €STR determination process as established by the €STR Guideline.

- The ECB policy and procedure for the cessation of the euro short-term rate (€STR) provides the policies and procedures that would be followed in the event of a cessation of the €STR owing to any situation or circumstance which would make it no longer representative of the underlying interest. The ECB reminds the users of the €STR that they are responsible for establishing their own fall-back provisions in the event of material changes to, or a cessation of, the €STR.

Resources

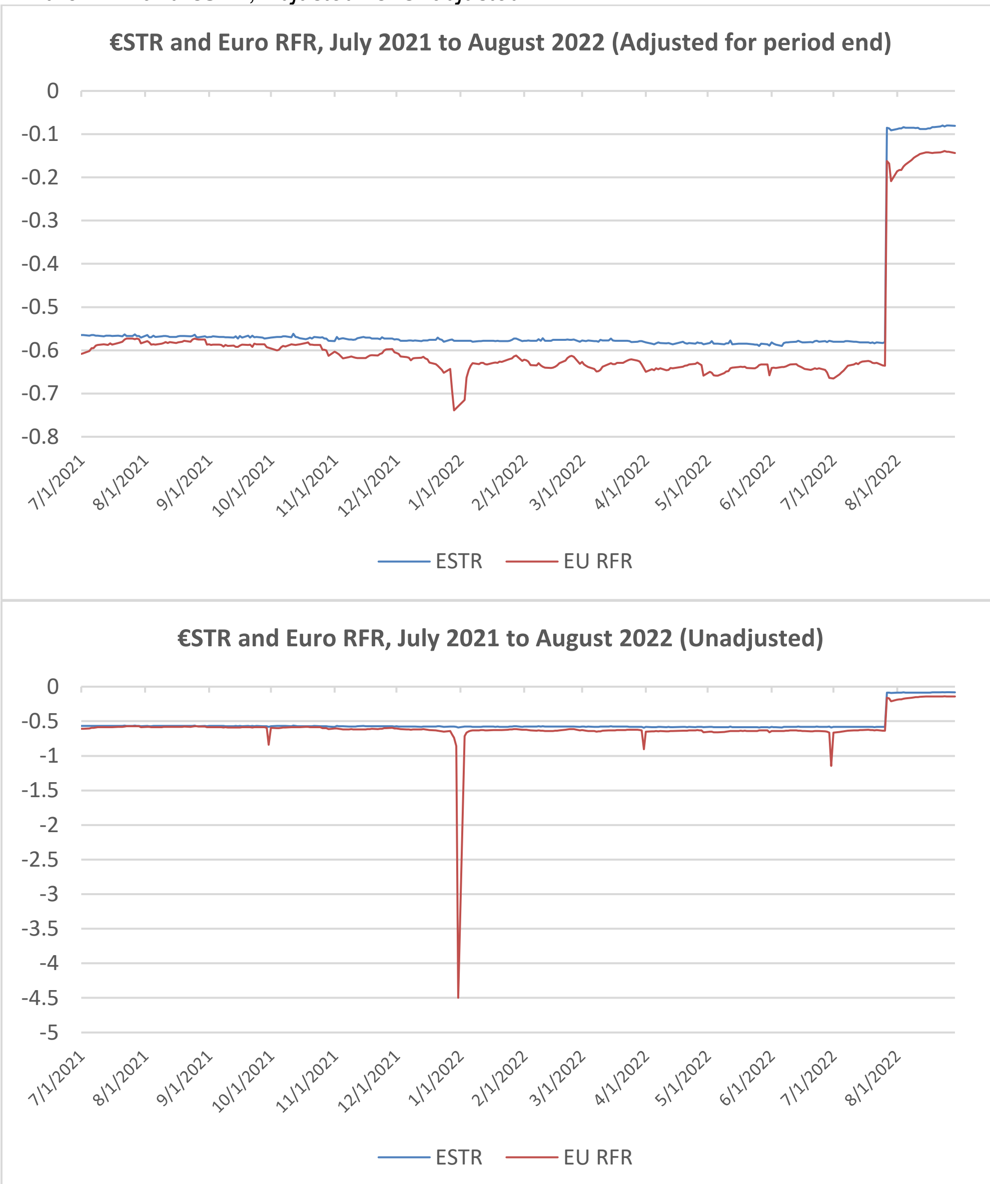
- ECB EONIA to €STR Fact Sheet
    - https://www.ecb.europa.eu/paym/interest_rate_benchmarks/WG_euro_risk-free_rates/shared/pdf/20191016/2019-10-16_WG_on_euro_RFR_meeting_Checklist.pdf
- White and Case Benchmark Overview
    - https://www.whitecase.com/insight-alert/eustr-v-euribor-battle-euro-benchmark
- ECB Methodology
    - https://www.ecb.europa.eu/paym/interest_rate_benchmarks/WG_euro_risk-free_rates/shared/pdf/ecb.ESTER_methodology_and_policies.en.pdf

Comparable Indices

RepoFunds Rates ("RFR"), published by CME Benchmark Administration ("CBA"), measure overnight, secured lending rates based on repo transactions in the euro area. Unlike €STR, RFR is secured by government bonds; as such, there is no true direct comparison to €STR.

However, both €STR and RFR measure EU-wide, overnight lending rates. Given that CBA publishes RFRs for ten EU sovereigns, as well as a “Euro RFR” that is based on all ten sovereigns, we recommend monitoring Euro RFR relative to €STR on an ongoing basis.

Figure 2.1A – Euro RFR and €STR, Adjusted vs. Unadjusted



As referenced in Figure 2.1B, €STR is strongly correlated with Euro RFR after adjusting Euro RFR data by removing quarter and year-end figures. (Note on the year-end adjustment: during these periods, certain collateral becomes scarce, which affects the rates at which lenders are willing to accept for the underlying bonds). The removal of these period ends are referred to as “Adjusted” in Figure 2.1A.

Note that the rate of change between €STR and Euro RFR is highly correlated – this is likely the more useful metric to monitor as it says a change in €STR is likely to coincide with a change in €STR. For instance, on 26 Jul 22, Euro RFR was -0.636 and €STR -0.581. On 27 Jul 22, the ECB raised interest rates by 0.50. On this day, Euro RFR moved to -

0.162 and €STR moved to -0.085, both almost exactly 0.50 higher than the day prior, coinciding with ECB's interest rate move.

Figure 2.1B – Correlation Table (Figures are adjusted for period end)

Rates	Correlation	Comments
€STR – Euro RFR	0.986	Compares nominal Euro RFR value to nominal €STR value
€STR Rate of Change – Euro RFR Rate of Change	0.925	Compares rate of Euro RFR value change w/ Rate of €STR value change

Resources

- RFR Benchmark methodology
    - https://www.cmegroup.com/market-data/cme-group-benchmark-administration/files/repofunds-rate-benchmark-methodology.pdf

Section 2.2 – Euribor

Index Overview

Euro Interbank Offered Rate (Euribor), administered by the European Money Markets Institute ("EMMI"), measures the average interest rate at which large European banks borrow funds in euros from each other on an unsecured basis. Published across 5 tenors (1 week, 1 month, 3 months, 6 months, and 12 months), Euribor is one of the most common reference rates with approximately €100 trillion in contracts tied to it as a reference. It is forward looking, with the rate on a given day representing borrowing rates over the tenor period.

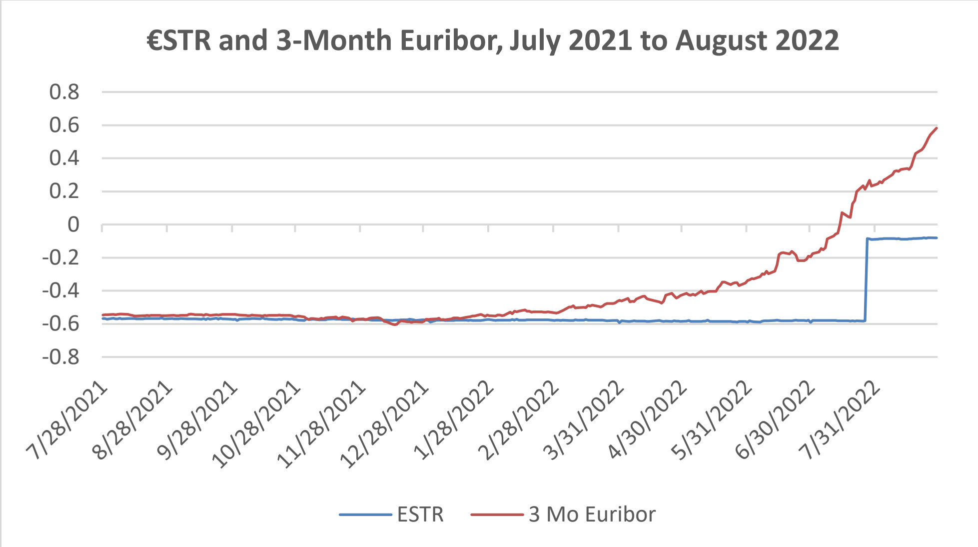
In 2019, it was granted authorization from the Benchmarks Regulation of the European Union (BMR) following reforms taken by EMMI beginning in 2015.

Given its common use as a reference rate, Euribor is also established as an underlying index for derivative contracts. EMMI has well-known and transparent licensing and pricing policies available for exchanges.

Comparable Indices

There is no direct comparable index to Euribor as there is no forward-looking, unsecured, term rate index for Europe other than Euribor. To demonstrate why Euribor is unique, compare it to €STR, as figure 2.2A does below which portrays the forward-looking nature of 3-month Euribor relative to €STR. While €STR represents point-in-time transactions, Euribor transactions price in expected interest rate increases by the ECB over a given period. The spike in July for €STR represents the actual interest rate increase implemented by the ECB.

Figure 2.2A – 3-Month Euribor and €STR



Source: Bloomberg

Indirectly, and for monitoring purposes, the yield for Euro area government debt 3-months forward could be compared with 3-Month Euribor. The ECB published this figure on a daily basis at noon Central European Time. They represent the yields on Euro area government debt over the upcoming three-month period (recall that Euribor is unsecured and not backed by government debt).

Figure 2.2B and 2.2C provide three years of historic rates and correlations between these rates, respectively. These figures are based on weekly average rates to “smooth out” some of the daily yield fluctuations. While using sovereign debt as a comparable to Euribor means that we will pick up a lot of movement that is specific to the sovereign credit market, this comparison may still be useful to track general expectations of three-month debt in the EU. These rates are strongly correlated with 3-month Euribor: using weekly average rates, the correlation between rate value is 0.892, and the correlation between rate of change in values is 0.692.

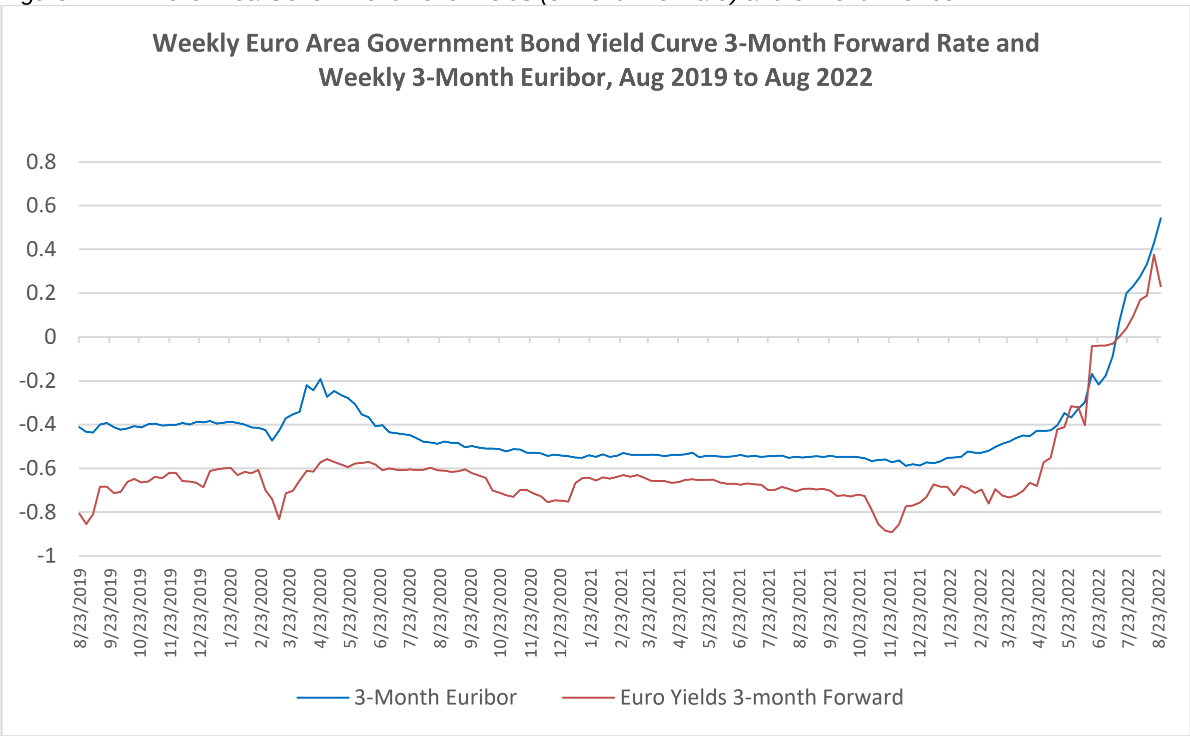
The following criteria are applied when selecting bonds:

- Only bonds issued in euro by euro area central government.
- Bonds with special features, including specific institutional arrangements, are excluded.
- Only fixed coupon bonds with a finite maturity and zero coupon bonds are selected, including STRIPS. Perpetual bonds and variable coupon bonds, including inflation-linked bonds, are not included.
- Only actively traded central government bonds with a maximum bid-ask spread per quote of three basis points are selected. The prices/yields are those at close of market on the reference day.
- In order to reflect a sufficient market depth, the residual maturity brackets have been fixed as ranging from three months up to and including 30 years of residual maturity.

More information about Euro area yield curves can be found here:

https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/euro_area_yield_curves/html/index.en.html

Figure 2.2B – Euro Area Government Bond Yields (3-Month Forward) and 3-Month Euribor



Source: Bloomberg

Figure 2.2C – Euro Area 3-months Forward Yields and 3-Month Euribor Correlation Chart

Rates	Correlation	Comments
Weekly Euro Area Yield – 3-Month Euribor	0.892	Compares Euro Area Yield 3-Month Forward to 3-Month Euribor (weekly)
Weekly Euro Area Yield rate of change – 3-month Euribor rate of change	0.692	Compares Euro Area Yield 3-Month Forward rate of change to 3-Month Euribor rate of change (weekly

Source: Bloomberg

Both ICE Futures Europe and Eurex list a Three-Month Euribor futures contract, with ICE having an entire family of futures and options products based on Euribor, including Options on Three-Month Euribor Futures, and Mid-Curve Options on Three Month Euribor Futures.

ICE is the largest of the two, with total open interest of 4,451,826 as of September 27, 2022 for the Three Month Euribor Future.

EMMI licenses 3-Month Euribor data for Futures trading according to the below schedule:

Figure 2.2D – Euribor License and Fee Table

Exchanges and Clearing Houses

Agreements with exchanges and clearing houses are built with several components.

Licence types	Clearing for less than 1 000 trades[11]	Normal Clearing Houses and Futures Exchanges
Futures/trading	-	€53 000
Clearing	€5 300	€21 200
Trademark[12]	€7 950	€31 800
Data Access	In accordance with **End Users Subscriptions**	

Methodology
A panel of 18 banks across Europe contribute to the construction of various Euribor rates. These banks are selected based active market participation and representative of the region.

Figure 2.2E – Panel of Euribor Banks

Belgium Belfius	**Luxembourg** Banque et Caisse d'Épargne de l'État
France BNP Paribas	**Netherlands** ING Bank
HSBC Continental Europe	**Portugal** Caixa Geral De Depósitos (CGD)
Natixis	**Spain** Banco Bilbao Vizcaya Argentaria
Crédit Agricole s.a.	Banco Santander
Société Générale	CECABANK
Germany Deutsche Bank	CaixaBank S.A.
DZ Bank	**UK** Barclays
Italy Intesa Sanpaolo	
UniCredit	

Source: www.emmi-benchmarks.eu

EMMI uses a three tier-ed approach to construct Euribor. According to EMMI:

- "Level 1 consists of contributions based solely on eligible transactions in the unsecured euro money market, with a minimal notional amount of 10 million euros – a criterion which has been amended in 2021 as the amount stood at 20 million previously. The contribution rate of each Panel Bank is calculated using the volume weighted average rate of the eligible transactions by tenor.

- Level 2 consists of contributions based on transactions across the broader money market maturity spectrum. When a Panel Bank has insufficient eligible transactions for a Level 1 contribution to be calculated for a given tenor, but that it has had transactions in nearby maturities, or quite recently, the contribution can be calculated using a range of calculation techniques to make a Level 2 contribution for that same tenor. These can be:
    - An adjusted linear interpolation from adjacent defined tenors
    - Transactions at non-defined tenors
    - Historical Level 1 contributions

- Level 3 consists of contributions based on transactions from a range of markets closely related to the unsecured euro money market. Each Panel Bank uses specific input data, and tailor-made modelling techniques depending on their own funding models

Data input can, for instance and non-exhaustively, consist of transactions that could not be included in Level 1 – like transactions below the 10 million threshold but conducted at market rates – or data from markets closely related to the unsecured euro money market.

Euribor benchmark is supported by a demonstrably large transaction pool, drawn from a diverse set of data sources, as noted in Figure 3A.

All Level 3 contributions made by a Panel Bank must be duly documented, validated, and always applied in a consistent fashion, under the guidance of The European Money Markets Institute."

Calculation

After determining eligibility according to the above methodology, the highest 15% and lowest 15% of submitted interest rates are eliminated, and the arithmetic mean of the remaining rates is used to calculate the Euribor for the day and tenor.

Data Integrity
EMMI employs a robust governance framework to ensure the reliability and integrity of Euribor. An Oversight Committee, comprised of at least ten independent subject-matter-experts, monitors the administration of the benchmark.

In addition, the Calculation Agent ensures that data inputs and outputs are validated. Major actions taken by the Calculation Agent include:

a) the efficient and timely operation of the daily Euribor determination process as defined in the Benchmark Determination Methodology for Euribor ("BDM"), with due regard for upholding the quality of the benchmark determination;
b) pre- and post-calculation data controls defined by EMMI;
c) the accurate and timely dissemination of the calculated Euribor rates to the authorized Data Vendors for publication;
d) the handling of access rights for authorized contributors to Euribor, in accordance with EMMI's instructions;
e) the regular reporting to EMMI on the quality of data submissions, including absent or persistently erroneous submissions;
f) the record retention of daily calculation events, actions taken and communications with Panel Banks;
g) immediately escalate to EMMI any significant issue that occurs during the calculation of Euribor, including but not limited to, contingency, business continuity and disaster recovery.

Source: https://www.emmi-benchmarks.eu/benchmarks/euribor/governance/

Resources

- Benchmark methodology
    - https://www.emmi-benchmarks.eu/benchmarks/euribor/methodology/

- Euribor Benchmark Statement

- https://www.emmi-benchmarks.eu/globalassets/documents/pdf/euribor/d0246d-2019-euribor-benchmark-statement-update-01-2021.pdf

- Full Governance Materials
    - https://www.emmi-benchmarks.eu/benchmarks/euribor/governance/

- Transparency Reports
    - https://www.emmi-benchmarks.eu/transparency-indicator-reports/

Section 3 – Compliance with Core Principles

Core Principle 2 – Compliance with Rules
Trading in the Contracts shall be subject to:

- CME Rulebook Chapter 4, which includes prohibitions against fraudulent, noncompetitive, unfair, and abusive practices;
- the Exchange's trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the Rulebook; and
- monitoring and surveillance by CME Group's Market Regulation Department, which has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.

Core Principle 3 – Contracts Not Readily Subject to Manipulation

As detailed in Section 2 and Figure 3A below, the €STR benchmarks and Euribor benchmark is supported by a demonstrably large transaction pool, drawn from a diverse set of data sources. Moreover, the statistical measure employed to produce the benchmarks on any given day – the transaction-volume-weighted provided by various financial institutions -- is highly robust.

In view of these considerations, both the benchmarks themselves and their application in connection with the Contracts possess more than sufficient integrity to deflect attempted cornering, manipulation, crowding, or exertion of undue influence upon final settlement of expiring contracts.

Figure 3A –Transaction Data by Month

	3-mo Euribor Volume (€B)	3-mo Euribor Transaction Count	€STR Volume (€B)	€STR Transaction Count
Jun-22	8.3	N/A	47.2	510
May-22	13.6	N/A	48.5	541
Apr-22	13.3	N/A	50.2	529
Mar-22	6.1	N/A	56.1	565
Feb-22	6.7	N/A	57.0	553
Jan-22	11.5	N/A	54.3	515
Dec-21	7.1	N/A	41.8	459
Nov-21	8.4	N/A	53.4	517
Oct-21	6.5	N/A	50.2	527
Sep-21	10.5	N/A	46.5	496
Aug-21	6.6	N/A	48.4	485
Jul-21	12.5	N/A	48.5	492
Jun-21	3.6	N/A	43.0	446
May-21	7.7	N/A	42.5	419
Apr-21	8.0	N/A	47.0	447
Mar-21	6.7	N/A	43.0	449

Feb-21	6.1	N/A	42.3	457
Jan-21	12.7	N/A	46.0	464
Dec-20	4.8	N/A	39.8	411
Nov-20	5.6	N/A	44.5	483
Oct-20	6.5	N/A	45.0	478
Sep-20	3.9	N/A	41.2	470
Aug-20	5.0	N/A	40.1	455
Jul-20	8.9	N/A	44.0	484
Jun-20	8.0	N/A	39.2	455
May-20	11.8	N/A	42.2	494
Apr-20	5.6	N/A	51.6	581
Mar-20	4.2	N/A	42.3	499
Feb-20	4.4	N/A	33.7	432
Jan-20	5.9	N/A	31.5	432
Avg.	7.7	N/A	45.3	485

Source: EMMI and ECB Data

Note: Euribor does not share transaction or trade count, likely as a way to keep data used to construct the rate anonymous. The "Transparency Indicator" homepage on the EMMI website states, "After consulting the market, The European Money Markets Institute has decided to publish the following aggregated anonymised indicators on a monthly basis to provide transparency in the determination of Euribor." This suggests that certain data, such as trade counts, is intentionally withheld from the transparency reports.

https://www.emmi-benchmarks.eu/benchmarks/euribor/transparency/

Core Principle 4 – Prevention of Market Disruption

Trading in the Contracts shall be subject to CME Rulebook Chapters 4 and 7, which include prohibitions on manipulation, price distortion, and disruption to the expiration process. As with any product listed for trading on a CME Group designated contract market, futures trading activity shall be subject to monitoring and surveillance by CME Group's Market Regulation Department.

Core Principle 5 – Position Limits or Accountability

The Contracts shall be subject to a Position Reporting Level of 850 contracts, a Single-Month Position Accountability Level of 10,000 net futures contract equivalents, and an All-Month Position Accountability Level of 10,000 net futures contract equivalents. The EUS spread futures contract will aggregate into the ESR futures contract on a 1:1 ratio.

To appreciate the proportions of these Position Accountability standards, consider that the representative level of traffic in the market for which trading activity supports the €STR benchmark is about €45 billion per day. Relative to this trading flow, the hypothetical holdings reflected in the Position Accountability Levels for ESR futures contract signify 0.06% as a percent of the contract size of €2500.

The proposed Reporting Level and Accountability Levels would mirror those of Three-Month Eurodollar and Three-Month SOFR Futures.

Core Principle 7 – Availability of General Information

The Exchange disseminated a Special Executive Report ("SER") that sets forth information regarding the specifications, terms, and conditions of the Contracts. The SER is also be posted on CME Group's website.

Core Principle 8 – Daily Publication of Trading Information

The Exchange shall publish trading volumes, open interest levels, and price information for the Contracts daily on its website and through quote vendors.

Core Principle 9 – Execution of Transactions
The Contracts will be available for trading on CME Globex, which provides for efficient, competitive, and open execution of transactions. Additionally, CME Globex affords reliability and global connectivity. The applicable CME Globex non-reviewable trading ranges shall be as set forth in Appendix D. The Contracts will also be available for clearing via CME ClearPort.

Core Principle 10 – Trade Information
All requisite trade information will be included in the audit trail and will suffice for the Market Regulation Department to monitor for market abuse.

Core Principle 11 – Financial Integrity of Contracts
The transactions in the Contract will be cleared by CME Clearing, which is registered with the Commission as a derivatives clearing organization, and which is subject to all CFTC regulations related thereto.

Core Principle 12 – Protection of Markets and Market Participants
CME Rulebook Chapters 4 and 5 set forth multiple strictures that preclude intermediaries from disadvantaging their customers. These Rules apply to trading in all of the Exchange's competitive trading venues and will apply to transactions in the Contract.

Core Principle 13 – Disciplinary Procedures
CME Rulebook Chapter 4 provides for the Exchange to discipline, suspend, or expel members or market participants who violate the rules of the Exchange. Trading in the Contracts will be subject to these provisions. The Exchange's Market Regulation Department has the authority to exercise its powers of enforcement, in the event that rule violations in the Contract are identified.

Core Principle 14 – Dispute Resolution
Disputes in respect of the Contracts are subject to the arbitration provisions set forth in CME Rulebook Chapter 6, which allow all nonmembers to submit to arbitration claims for financial loss resulting from transactions on the Exchange. Pursuant to these provisions, any member named as a respondent in any such claim submitted by a nonmember is required to participate in arbitration proceedings. Additionally, the Exchange requires members to resolve via arbitration all disputes concerning transactions on the Exchange.

Pursuant to Section 5c(c) of the Act and Regulation 40.2(a), the Exchange certifies that the Contracts comply with the Act, including all regulations thereunder. There were no substantive opposing views to this proposal.

The Exchange certifies that this submission has been concurrently posted on the Exchange's website at http://www.cmegroup.com/market-regulation/rule-fillings.html.

Should you have any questions concerning the above, please contact the undersigned at (212) 299-2200 or CMEGSubmissionInquiry@cmegroup.com.

Sincerely,

/s/ Christopher Bowen
Managing Director and Chief Regulatory Counsel

Attachments:	Appendix A	CME Rulebook Chapter 480
	Appendix B	CME Rulebook Chapter 481
	Appendix C	Position Limit, Position Accountability, and Reportable Level Table (attached under separate cover)
	Appendix D	CME Rule 588.H. – ("Globex Non-Reviewable Trading Ranges") Table
	Appendix E	CME Rule 589. Special Price Fluctuation Limits and Daily Price Limits Table
	Appendix F	Exchange Fees
	Appendix G	Daily Settlement Procedure Documents

Appendix A
CME Rulebook

Chapter 480
Euro Short-Term Rate (€STR) Futures

48000. SCOPE OF CHAPTER

This chapter is limited in application to Euro Short-Term Rate (€STR) Futures ("futures" or "contract"). In addition to this chapter, the futures shall be subject to the general rules and regulations of the Exchange insofar as applicable.

For purposes of this chapter, unless otherwise specified, times referred to herein shall refer to and indicate London time.

48001. CONTRACT SPECIFICATIONS

Each contract is valued at €2,500 times the contract-grade IMM Index (Rule 48002.C.).

48002. TRADING SPECIFICATIONS

48002.A. Trading Schedule

Futures contracts shall be scheduled for trading and delivery during such hours and in such months as may be determined by the Exchange.

48002.B. Trading Unit

For a contract for a given delivery month, the unit of trading shall be compounded daily Euro Short-Term Rate ("€STR") interest during such contract's reference period subject to Rule 48003., expressed as an interest rate per annum for which (i) such interest rate shall be on the basis of the actual number of days in such delivery reference period, divided by a 360-day year, and (ii) each basis point per annum of such interest rate shall be worth €25 per futures contract. €STR shall be as published by the European Central Bank ("ECB").

48002.C. Price Increments

Contract prices shall be quoted in terms of the IMM Index, 100.0000 minus interest rate per annum correspondent to €STR during the contract delivery month, as specified in Rule 48002.B.

Example: If €STR is 2.0275 percent per annum, it shall be quoted as an IMM Index value of 97.9725.

The minimum price fluctuation shall be 0.00125 for the first nearby contract closest to final expiry, equal to €3.125 per contract; 0.0025 for the second nearby contract that is second closest to final expiry, equal to €6.25 per contract; and 0.005 for all other contracts, equal to €12.50 per contract.

48002.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

48002.E. [Reserved]

48002.F. Special Price Fluctuation Limits

At the commencement of each trading day, the contract shall be subject to special price fluctuation limits as set forth in Rule 589 and in the Special Price Fluctuation Limits and Daily Price Limits Table in the Interpretations & Special Notices Section of Chapter 5.

48002.G. Termination of Trading

Trading in an expiring contract shall terminate at the close of trading on the TARGET2 business day immediately preceding the third Wednesday three months forward from the expiring contract month.

48002.H. [Reserved]

48003. SETTLEMENT PROCEDURES

Delivery shall be by cash settlement.

48003.A. Final Settlement Price

1. Definition of Reference Quarter

For a contract for a given delivery month, the Reference Quarter shall be the interval that ends on (and does not include) the third Wednesday of the contract delivery month, and that begins on (and includes) the third Wednesday of the third calendar month preceding the contract delivery month.

Example: For a hypothetical contract for which the delivery month is March 2022, the contract Reference Quarter shall start on (and shall include) the third Wednesday of December 2021 (December 15, 2021) and shall end on (and shall not include) the third Wednesday of March 2022 (March 16, 2022).

2. Definition of Final Settlement Price

For a contract for a given delivery month, the Final Settlement Price shall be 100 minus compounded daily €STR during the contract Reference Quarter, as follows:

Final Settlement Price = 100 - R

where

$$R = [\ \Pi_{i=1 \ldots n} \{1+(d_i /360)*(r_i /100)\} - 1\ ] \times (360/D) \times 100$$

n =the number of TARGET2 market business days ("cash business days") during such Reference Quarter.

i = is the running variable that indexes each cash business day in such Reference Quarter, such that i takes the values i = 1,2,…,(n-1),n.

$\Pi_{i=1 \ldots n}$ denotes the product of the values indexed by the running variable, i = 1,2,…,n.

r_i the €STR value corresponding to cash business day i, expressed as an interest rate per annum.

Example: If €STR for the ith cash business day is two and one quarter percent, then r_i = 2.25.

d_i = the number of calendar days to which r_i applies. For any calendar day that is not a cash business day (eg, weekend days, TARGET2 market holidays), the applicable value shall be €STR for the immediately preceding cash business day.

Examples: If the ith day is a Monday, a Tuesday, a Wednesday, or a Thursday, and if the next following calendar day is a cash business day, then d_i = 1. If the ith day is a Friday, and if the next following Monday is a cash business day, then d_i = 3.

D = the number of calendar days in the Reference Quarter: $D = \Sigma_{i=1 \ldots n} d_i$.

48003.B. Final Settlement

Clearing members holding open positions in a contract at the time of termination of trading in that contract shall make payment to or receive payment from the Clearing House in accordance with normal variation performance bond procedures based on a settlement price equal to the final settlement price.

48004. [RESERVED]

Appendix B
CME Rulebook

Chapter 481
Euro Short-Term Rate (€STR) – Three-Month Single Contract Basis Spread Futures

48100. SCOPE OF CHAPTER

This chapter is limited in application to Euro Short-Term Rate (€STR) – Three-Month Single Contract Basis Spread Futures ("Spread Futures," "futures" or "contract"). In addition to this chapter, the futures shall be subject to the general rules and regulations of the Exchange insofar as applicable.

For purposes of this chapter, unless otherwise specified, times referred to herein shall refer to and indicate London time.

48101. CONTRACT SPECIFICATIONS

Each contract is valued at €2,500 times the contract-grade IMM Index (Rule 48102.C.).

48102. TRADING SPECIFICATIONS

48102.A. Trading Schedule

Futures contracts shall be scheduled for trading and delivery during such hours and in such months as may be determined by the Exchange.

48102.B. Trading Unit

For a contract for a given delivery month, prices shall be quoted as the value of the spread between the expected 3-month Euribor benchmark rate and the expected compounded overnight €STR benchmark rate over the same interest period, expressed as an interest rate per annum such that each basis point per annum of interest shall be worth €25 per futures contract.

48102.C. Price Increments

Daily Contract prices shall be quoted as the value of the expected spread as specified in Rule 48102.B.

> Example: If the value of the spread between the expected annualized rate of the 3-Month Euribor and the expected annualized rate of the compounded overnight €STR benchmark rate over the same interest period is 0.4500, the daily price shall be quoted as 0.4500.

The minimum price fluctuation shall be 0.0025, equal to €6.25 per contract.

48102.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

48102.E. [Reserved]

48102.F. Special Price Fluctuation Limits

At the commencement of each trading day, the contract shall be subject to special price fluctuation limits as set forth in Rule 589 and in the Special Price Fluctuation Limits and Daily Price Limits Table in the Interpretations & Special Notices Section of Chapter 5.

48102.G. Termination of Trading

Trading in an expiring contract shall terminate upon the dissemination of the 3-month Euribor at 11:00 a.m. Central European Time two TARGET2 business days immediately preceding the third Wednesday of the expiring contract month

48102.H. [Reserved]

48103. SETTLEMENT PROCEDURES

Delivery shall be exercised into a financial futures contract.

48103.A. Final Settlement Price

Final settlement price, occurring two TARGET2 business days prior to the third Wednesday of the expiring contract month (IMM Wednesday), shall be equal to the daily settlement price on three TARGET2 business days prior to IMM Wednesday.
Assignment price into €STR contract (ESR) of same contract named month shall be at 100 minus the 3-Month Euribor, on the final settlement date, plus the final settlement price.

> Example: If 3-Month Euribor on the Monday two days before IMM Wednesday is 0.7600 percent per annum and the spread settlement on the same day is 0.4500, assignment price will be at the IMM Index value of 99.6900 (100-0.7600+0.4500).

48103.B. Final Settlement

Clearing members holding open positions in a contract at the time of termination of trading in that contract shall make payment to or receive payment from the Clearing House in accordance with normal variation performance bond procedures based on a settlement price equal to the final settlement price.

48104. [RESERVED]

Appendix C

CME Rulebook
Chapter 5
("Trading Qualifications and Practices")
Position Limit, Position Accountability, and Reportable Level Table
(additions underscored)
(attached under separate cover)

Appendix D

CME Rulebook
Chapter 5
("Trading Qualifications and Practices")
CME Rule 588.H. ("Globex Non-Reviewable Trading Ranges") Table
(additions underscored)

Instrument	Globex Symbol	Globex Non-Reviewable Ranges (NRR)	NRR: Global Format	NRR: Minimum Ticks	NRR: Globex Format	NRR: Minimum Ticks
Euro Short-Term Rate (€STR) Futures - Front Month	ESR	2.5 basis points	2.5	20	Each leg evaluated as an outright	
Euro Short-Term Rate (€STR) Futures - 2nd Nearby Contract this is 2nd closest to final expiry	ESR	2.5 basis points	2.5	10	Each leg evaluated as an outright	
Euro Short-Term Rate (€STR) Futures - All Others	ESR	2.5 basis points	2.5	5	Each leg evaluated as an outright	
Euro Short-Term Rate (€STR) - Three-Month Single Contract Basis Spread Futures	EUS	2.5 basis points	2.5	10	Each leg evaluated as an outright	

Appendix E

CME Rulebook
Chapter 5
("Trading Qualifications and Practices")
CME Rule 589. – Special Price Fluctuation Limits and Daily Price Limits Table

Product	Rulebook Chapter	Commodity Code	PRIMARY / ASSOCIATED	ASSOCIATED WITH	Dynamically Calculated Variant - All Hours
Euro Short-Term Rate (€STR) Futures	480	ESR	Primary	Primary	50 basis points
Euro Short-Term Rate (€STR) - Three-Month Single Contract Basis Spread Futures	481	EUS	Associated	ESR	-

Appendix F
Exchange Fees

Membership Type	Venue/Transaction	Fee
Individual Members Clearing Members Rule 106.J Equity Member Firms & Rule 106.J Qualified Subsidiaries Rule 106.I Members & Rule 106.I Qualified Affiliates Rule 106.S Member Approved Funds	CME Globex	$0.19
	EFP|EFR|Block	$0.29
	Delivery	$0.09
Rule 106.D Lessees Rule 106.F Employees	CME Globex	$0.37
	EFP|EFR|Block	$0.50
	Delivery	$0.30
Rule 106.R Electronic Corporate Members (For other than CME Globex, EFP, EFR, Block - Non-Member rates apply)	CME Globex	$0.49
	EFP|EFR|Block	$0.90
Rule 106.H and 106.N Firms Clearing Non-Equity Member Firms	CME Globex	$0.49
	EFP|EFR|Block	$0.69
	Delivery	$0.49
International Incentive Program (IIP) Participants International Volume Incentive Program (IVIP) Participants	CME Globex	$0.50
	EFP|EFR|Block	$1.35
	Delivery	$0.50
Central Bank Incentive Program (CBIP) Participants Latin American Fund Manager Incentive Program (FMIP) Participants	CME Globex	$0.75
	EFP|EFR|Block	$1.35
	Delivery	$0.70
Members Trading Outside of Division (For other than CME Globex During ETH - Non-Member rates apply)	CME Globex During ETH Only	$0.80
Non-Members	CME Globex	$1.25
	CME Globex - Bundles	$0.80
	EFP|EFR|Block	$1.35
	Delivery	$0.70

Processing Fees	Fee
Position Adjustment/Position Transfer	$0.10
Give-Up Surcharge	$0.05
Facilitation Fee	$0.00

Appendix G
Daily Settlement Procedure Documents

Normal Daily Settlement Procedures for the Euro Short-Term Rate (€STR) Futures Contract (ESR)

All Contract Months in their Interest Accrual Period (ESR)

Serial and Quarterly contract months that are in their accrual period (that is; contracts that do not have a matching Euribor contract) will be settled to the midpoint of the CME Globex bid/ask during the (16:05:00 to 16:15:00 London time) settlement period, with adjustments made to incorporate relevant bid/ask activity in the spread between the serial (or front quarterly month if quarter tick eligible) and the first non-quarter tick eligible quarterly contract.

All Remaining Contract Months (ESR)

ESR not in their final settlement accrual period will settle to the following formula. The matching month ICE Euribor daily settlement + EUS settlement will equal the ESR settlement price. For example, if the Dec 2023 Euribor futures settle at 99.000 and the Dec 2023 EUS settles at .20 basis points the Dec 2023 ESR will settle at 99.200.

If you have any questions, please call the CME Global Command Center at 800.438.8616, in Europe at 44.800.898.013, or in Asia at 65.6532.5010.

Normal Daily Settlement Procedures for the Euro Short-Term Rate (€STR) – Three-Month Single Contract Basis Spread Futures Contract (EUS)

CME Group staff determines the daily settlements for the EUS based on trading activity on CME Globex between 16:05:00 and 16:15:00 London time, the settlement period.

Tier 1: Each contract month settles to its own volume-weighted average price (VWAP) of trades that occur between 16:05:00 and 16:15:00 London time, the settlement period, rounded to the nearest tradable tick.

Tier 2: If no trades occur on CME Globex during the settlement period, then the last trade is used to determine the settlement price validated against the CME Globex bid/ask.

Tier 3: In the absence of any trading activity, the daily settlement price will be determined by applying the net change from the preceding contract month to the given contract month’s prior daily settlement price validated against the CME Globex bid/ask.

If you have any questions, please call the CME Global Command Center at 800.438.8616, in Europe at 44.800.898.013, or in Asia at 65.6532.5010.