

**Request for Proposal (RFP) for  
Vendor to Publish and  
Administer European Across-  
the-Curve Credit Spread  
Indices (EURAXI) which work  
in conjunction with the Euro  
short-term rate (€STR)**

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SOFR Academy, Inc.  
525 Broome Street, Level 2  
New York, NY 10013 USA  
Telephone +1 855 236 6106  
Website [www.SOFR.org](http://www.SOFR.org)  
Email [info@SOFR.org](mailto:info@SOFR.org)

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## **Request for Proposal (RFP) for Vendor to Publish and Administer European Across-the-Curve Credit Spread Indices (EURAXI) which work in conjunction with the Euro short-term rate (€STR)**

### **Introduction and background information**

Since the 2007-2008 financial crisis, large banks have responded to market and regulatory pressures to increase stable funding by significantly changing their funding structures. Underlying the decline in many banks' share of wholesale funding has been a cutback in the use of short-term funding and a contraction in interbank liabilities<sup>1</sup>.

In Europe, members of the European Central Bank's (ECB) Money Market Contact Group (MMCG) have noted<sup>2</sup> that the robustness of Euribor as a benchmark index has been suffering in general and acknowledged in particular that maturities up to three months adjusted sluggishly to rate changes, owing to methodological features of the Euribor calculations but also reflecting that banks avoided accepting unsecured deposits at maturities that did not confer any benefit in terms of liquidity regulation.

In 2023, SOFR Academy, Inc. (SOFR Academy) commissioned a European AXI (EURAXI™) feasibility study<sup>3</sup> which was authored by two leading academics at the University of Oxford, England. The White Paper lays out the framework for across-the-curve credit spread indices<sup>4</sup> for the European market, which reflect the average funding costs for European major commercial banks and can serve as references for credit pricing and risk management. EURAXI is a transaction-based credit spread benchmark for Euro interest rates, which takes into account specific features of the Euro-denominated wholesale funding.

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<sup>1</sup> See '*Structural changes in banking after the crisis*' – Bank for International Settlements report prepared by a Working Group established by the Committee on the Global Financial System. The Group was chaired by Claudia Buch (Deutsche Bundesbank) and B Gerard Dages (Federal Reserve Bank of New York), available here: <https://www.bis.org/publ/cgfs60.pdf>

<sup>2</sup> [https://www.ecb.europa.eu/paym/groups/pdf/mmccg/20221207/2022\\_12\\_07\\_MMCG\\_summary.pdf](https://www.ecb.europa.eu/paym/groups/pdf/mmccg/20221207/2022_12_07_MMCG_summary.pdf)

<sup>3</sup> Available at <https://sofracademy.com/wp-content/uploads/2023/06/EURAXI-22.06.2023.pdf>

<sup>4</sup> For more information on European across-the-curve credit spread indices (AXI) please visit <https://sofracademy.com/european-axi/>

Having reviewed the EURAXI™ feasibility study, SOFR Academy, University of Oxford academics, and other noteworthy academics with requisite benchmark design experience believe that a European AXI can be produced in alignment the highest international standards for the construction, publication, and administration of financial benchmarks. SOFR Academy seeks an experienced vendor to publish and administer EURAXI™ and its extension, the EUR Financial Conditions Credit Spread Index (EUR-FXI) which follows the same methodology as AXI, but with underlying transactions expanded beyond banks to include all financial institutions as well as corporate funding transactions. The intention is that EURAXI™ and EUR-FXI will be made available only as spreads to the Euro short-term rate (€STR). The advantage of this approach is that financial instruments linked to EURAXI™ and EUR-FXI can trade independently thus ensuring that market liquidity is not diverted from €STR.

Using the methodology and data sources proposed by the University of Oxford academics, EURAXI™ and EUR-FXI should be calculated and published on a daily basis. Maturities should include 1-month, 3-month, 6-month and 1-year as well as the unscaled raw indices. The EURAXI™ benchmark administrator should make the published data available to other market data vendors and publishers at reasonable cost.

EURAXI™ and EUR-FXI should be published to the highest possible international standards of transparency. For both the long-term and short-term components, the EURAXI™ benchmark administrator should publish underlying statistical data on a daily basis including but not limited to the number of underlying transactions, the notional volume (in Euro) of underlying transactions and the weighted average maturity of each component (in years). The EURAXI™ benchmark administrator should publish detailed methodology documentation as well as information that enables users to obtain samples of input data. In the event that input data is expanded to include transactions from a European Union consolidated tape<sup>5</sup> (CP) and that the CP provider implements reporting dissemination caps<sup>6</sup> under the supervision of the European Securities and Markets Authority (ESMA), the EURAXI™ benchmark administrator should publish a ratio of the capped-to-uncapped data so that users can quantify the larger uncapped contemporaneous transaction volumes.

The EURAXI™ benchmark administrator should consider and clearly disclose how they have considered applying the “concept of proportionality” to safeguard market integrity and financial stability. In connection with this, consideration should be given to the relative size of the underlying market in relation to the volume of trading in the market that references the benchmark taking into account specific features of Euro-denominated wholesale funding market dynamics. This analysis should be undertaken separately for EURAXI™ and EUR-FXI.

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<sup>5</sup> <https://www.tradeweb.com/newsroom/media-center/news-releases/bloomberg-marketaxess-and-tradeweb-sign-joint-venture-agreement/>

<sup>6</sup> For example, in the United States, the Trade Reporting and Compliance Engine (TRACE) operated by Financial Industry Regulatory Authority (FINRA) implements reporting and dissemination protocols. See <https://www.finra.org/filing-reporting/trade-reporting-and-compliance-engine-trace/trace-reporting-timeframes>

## Users of European AXI

The total aggregate assets of European Union headquartered credit institutions rose from €30.44 trillion in December 2021 to €30.85 trillion in December 2022.<sup>7</sup> The most heavily referenced interest rate benchmark is EURIBOR, which was declared a critical benchmark by the European Commission in 2016 because of its systemic importance for financial stability. The total outstanding volume of financial instruments and contracts using EURIBOR as a reference exceed €100 trillion<sup>8</sup>.

It is anticipated that EURAXI™ may be a helpful reference rate benchmark for credit pricing and risk management for a range of financial institutions, including but not limited to European banking institutions, asset managers and hedge funds. Given the robustness of the underlying markets upon which EURAXI™ is based and the broad coverage obtained from across the spectrum of yield curve maturities, it can also serve as a reliable reference rate for risk management purposes, as well as for market participants such as hedge funds who may wish to take speculative positions in derivatives linked to EURAXI™. Further, EURAXI™ expands the available options for European policy makers in connection with contract fallbacks<sup>9</sup> if EURIBOR is discontinued.

The development of a EURAXI™ may be useful as a reference rate spread in multi-currency loan facilities and allows for the eventual development of cross-currency basis products that may reference US-dollar AXI, which is currently published and administered by Invesco Indexing LLC, an independent and recognized index provider owned by American investment management company Invesco, Ltd. (NYSE: IVZ).<sup>10</sup>

## Implementation support

Both University of Oxford Academics and SOFR Academy will provide the European AXI Benchmark Administrator with advisory and consultative services during implementation.

## Input data

It is anticipated that input data for EURAXI™ will be sourced from Money Market Statistical Reporting (MMSR) for short term EURAXI™. Long term EURAXI production requires detailed data on Euro denominated long term securities issuance and transactions (with residual maturities between one to five years). The ECB's Centralized Securities Database (CSDB)<sup>11</sup> has been identified as the best candidate. If and when available, long-term data may be

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<sup>7</sup> <https://www.ecb.europa.eu/press/pr/date/2023/html/ecb.pr230622~a115bde6aa.en.html>

<sup>8</sup> Source: The European Money Markets Institute

<sup>9</sup> Fallback language refers to contractual provisions that specify the trigger events for a transition to a replacement rate, the replacement rate, and the spread adjustment to align the replacement rate with the benchmark being replaced—in this case EURIBOR.

<sup>10</sup> See the Invesco USD-AXI website here: <https://www.invescosofracademyaxi.com/>

<sup>11</sup> [https://www.ecb.europa.eu/stats/financial\\_markets\\_and\\_interest\\_rates/securities/html/index.en.html](https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/securities/html/index.en.html)

supplemented by the forthcoming 'consolidated tape' for long term EURAXI™ calculations which will be supervised by the ESMA.

Priority should be given to data sourced from regulated markets or exchanges (including in some cases with mandatory post-trade transparency requirements) because it benefits from the nature of checks and monitoring in place at the regulated markets or exchanges, as well as regulators' authority over rules governing the listing and trading of financial instruments referencing the benchmarks.

### **Compliance with Regulations**

By responding to the RFP, each vendor commits to compliance with all relevant regulations and to working with authorities if required.

### **Communications Strategy**

The EURAXI™ benchmark administrator should propose a communication strategy for product launch (website, white papers, webinars, and engagement with industry groups).

### **Additional information**

- SOFR Academy's EURAXI™ microsite is available [here](#).
- EURAXI™ Press Release [English] is available [here](#).
- EURAXI™ Press Release [French] is available [here](#).
- EURAXI™ Press Release [German] is available [here](#).
- The 'EURAXI: a benchmark for Euro credit spreads' paper by University of Oxford academics is available for download [here](#).
- Risk.net article | 'Euro Axi rate proposed as Euribor fallback' by Helen Bartholomew is available [here](#)

### **Institutional and managerial capacity**

Identify key staff and describe their technical skills, anticipated roles, and relevant experience. Describe your firm's internal and external audit procedures, and the ability to conduct independent audits.

### **Alignment with vendor strategy**

SOFR Academy is interested in understanding how the publication of EURAXI™ may fit in with respondents' existing operations in Europe or align with any strategic plans that interested firms may have for the European market, including at the group level.

## Submissions

Interested firms should submit responses in writing to SOFR Academy at [AXI@SOFR.org](mailto:AXI@SOFR.org) by October 31, 2023. SOFR Academy will evaluate responses in consultation with University of Oxford academics and may require selected firms to present their proposals. Following SOFR Academy selection, the name of the identified administrator will be published. The administrator should be prepared to begin publication of EURAXI™ and EUR-FXI on or around June 30, 2024 (forward-looking term rates at standard money market tenors in addition to the raw unscaled indices).

Questions about the RFP process should be sent to [AXI@SOFR.org](mailto:AXI@SOFR.org). Firms may modify their responses until the closing date above.

## About Rama Cont

Rama Cont is Professor of Mathematics and Chair of Mathematical Finance at the [University of Oxford](https://www.oxford.ac.uk/) and Director of the EPSRC Centre for Doctoral Training in Mathematics of Random Systems. Rama Cont's research focuses on stochastic analysis, stochastic processes and mathematical modelling in finance, in particular the modelling of extreme market risks, liquidity risk and systemic risk and pathwise approaches in stochastic analysis. He has co-authored more than 80 research publications, including the widely cited monograph *Financial Modelling with Jump Processes* (2003). He was the founding director of the Columbia Centre for Financial Engineering and founding director of the CFM-Imperial Institute of Quantitative Finance from 2014 to 2018. Prof. Cont was awarded the Louis Bachelier Prize by the French Academy of Sciences in 2010 for his research on mathematical modelling in finance and the Royal Society Award for Excellence in Interdisciplinary Research in 2017 for his work on systemic risk modelling. He was elected Fellow of the Society for Industrial and Applied Mathematics (SIAM) in 2017 for his 'contributions to stochastic analysis and mathematical modelling in finance.'

## About Susanna Saroyan

Susanna Saroyan is a Senior Research Fellow at the [Institute for New Economic Thinking](https://www.inet.ox.ac.uk/) and the Oxford Martin School and an Associate Member at the Department of Economics at the University of Oxford. She holds a Ph.D. in Economics and was awarded a Marie Skłodowska-Curie Individual Fellowship. Susanna's research focuses on monetary and financial economics, and the adoption of interdisciplinary and innovative modelling approaches in these fields. Her current research interests include the modelling and stress testing of climate risk and other non-financial risks, with the aim of capturing macro-financial linkages and feedback effects. Her broader research work addresses policy issues related to financial stability, such as the effect of unconventional monetary policies on money markets (credit and liquidity risks), or the impact of prudential reforms on bank-sovereign risk ties and money market integration in times of stress (with a focus on the Euro money markets).

## About SOFR Academy

SOFR Academy, Inc. provides financial education and market information to empower corporations, financial institutions, governments, and individuals to make better decisions. The Firm's panel of advisors includes academics from Tsinghua University, Harvard University, the University of California Berkeley, New York University, The University of Oxford and London Business School, as well as experienced sales and trading professionals. SOFR Academy is a member of the American Economic Association (AEA), the Loan Syndications and Trading Association (LSTA), the International Swaps and Derivatives Association (ISDA), the Asia Pacific Loan Market Association (APLMA), the Bankers Association for Finance and Trade (BAFT) which is a wholly owned subsidiary of the American Bankers Association (ABA), the U.S. Chamber of Commerce (USCC) and the Bretton Woods Committee (BWC). For more information, please visit [www.SOFR.org](http://www.SOFR.org).

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The Euro Short-Term Rate ("€STR") calculated, maintained and published by the European Central Bank ("ECB") on its website and via the Market Information Dissemination ("MID") platform and the ECB's Statistical Data Warehouse, is available free of charge subject to the ECB's Terms of Use available at [ecb.europa.eu](http://ecb.europa.eu). The ECB is the administrator of the €STR benchmark and the intellectual property owner of the "€STR" mark. The ECB has overall responsibility for providing €STR which reflects the wholesale euro unsecured overnight borrowing costs of euro area banks. The ECB has no affiliation with SOFR Academy, is in no way responsible for the potential calculation, maintenance, or publication EURAXI<sup>™</sup> and shall in no event have any liability for any use of, or reliance on, the EURAXI<sup>™</sup> or any data included therein. The ECB in no way guarantees the timeliness, accurateness, completeness of, or fitness for a particular purpose and accepts no liability or responsibility for any loss, damage, expense or claim (including, but not limited to any direct, indirect or consequential loss, whether or not such loss is foreseeable and whether or not the ECB has been apprised of the use to



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Darrell Duffie, who is The Adams Distinguished Professor of Management and Professor of Finance at Stanford Graduate School of Business, is a co-author of the proposal for AXI and FXI but has no related compensation and has no affiliation with SOFR Academy. Duffie was a Resident Scholar at the New York Fed for the 2022-2023 academic year. Duffie is a Research Fellow of the National Bureau of Economic Research, a Fellow of the Econometric Society, and a Fellow of the American Academy of Arts and Sciences. Duffie is a past president of the American Finance Association. In 2014, he chaired the Market Participants Group, charged by the Financial Stability Board with recommending reforms to Libor, Euribor, and other interest rate benchmarks<sup>12</sup>. He is a member of the Leadership Team of the G30 Working Group on Treasury Market Liquidity.

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<sup>12</sup> Final Report of the Market Participants Group on Reforming Interest Rate Benchmarks available at [https://www.fsb.org/2014/07/r\\_140722b/](https://www.fsb.org/2014/07/r_140722b/)